DOCUMENT RESUME

ED 461 347 HE 034 628

AUTHOR	Valimaa, Jussi, Ed.
TITLE	Finnish Higher Education in Transition: Perspectives on Massification and Globalisation.
INSTITUTION	Jyvaskyla Univ. (Finland). Inst. for Educational Research.
ISBN	ISBN-951-39-1133-0
PUB DATE	2001-00-00
NOTE	226p.
AVAILABLE FROM	Institute for Educational Research, Customer Services, University of Jyvaskyla, P.O. Box 35, FIN-40351 Jyvaskyla, Finland (23.55 Euro). Tel: +358 14 260 3220; Fax: +358 14 260 3241; e-mail: terttu.airama@ktl.jyu.fi; Web site: http://www.jyu.fi/ktl/.
PUB TYPE	Books (010) -- Collected Works - General (020)
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	Educational Change; *Educational Trends; Foreign Countries; *Higher Education
IDENTIFIERS	Finland; Globalization

ABSTRACT

This book discusses recent changes in Finnish higher education, pinpointing the changes and analyzing what they mean. The chapters are: (1) "GeoPolitical and Cultural Coordinates for Finnish History" (Jussi Valimaa); (2) "A Historical Introduction to Finnish Higher Education" (Jussi Valimaa); (3) "Analysing Massification and Globalisation" (Jussi Valimaa); (4) "Reflections on the Modern Mass University and the Question of the Autonomy of Thinking" (Eeva Kallio); (5) "Going to School at University?" (Sanna Honkimaki); (6) "Academic Life and the Pressure of Massification" (Helena Aittola); (7) "Doctoral Studies in the 1990s: From Elite to Mass Training?" (Pentii Maatta); (8) "The Open University in a Massifying Higher Education System" (Ellen Piesanen); (9) "Strategic Flow and Finnish Universities" (Jussi Valimaa and Hannu Jalkanen); and (10) "Discussion: Finnish Higher Education Faces Massification and Globalisation" (Valimaa, Aittola, Honkimaki, Jalkanen, Kallio, Maatta, and Piesanen). A Finnish Summary is also included. (EV)

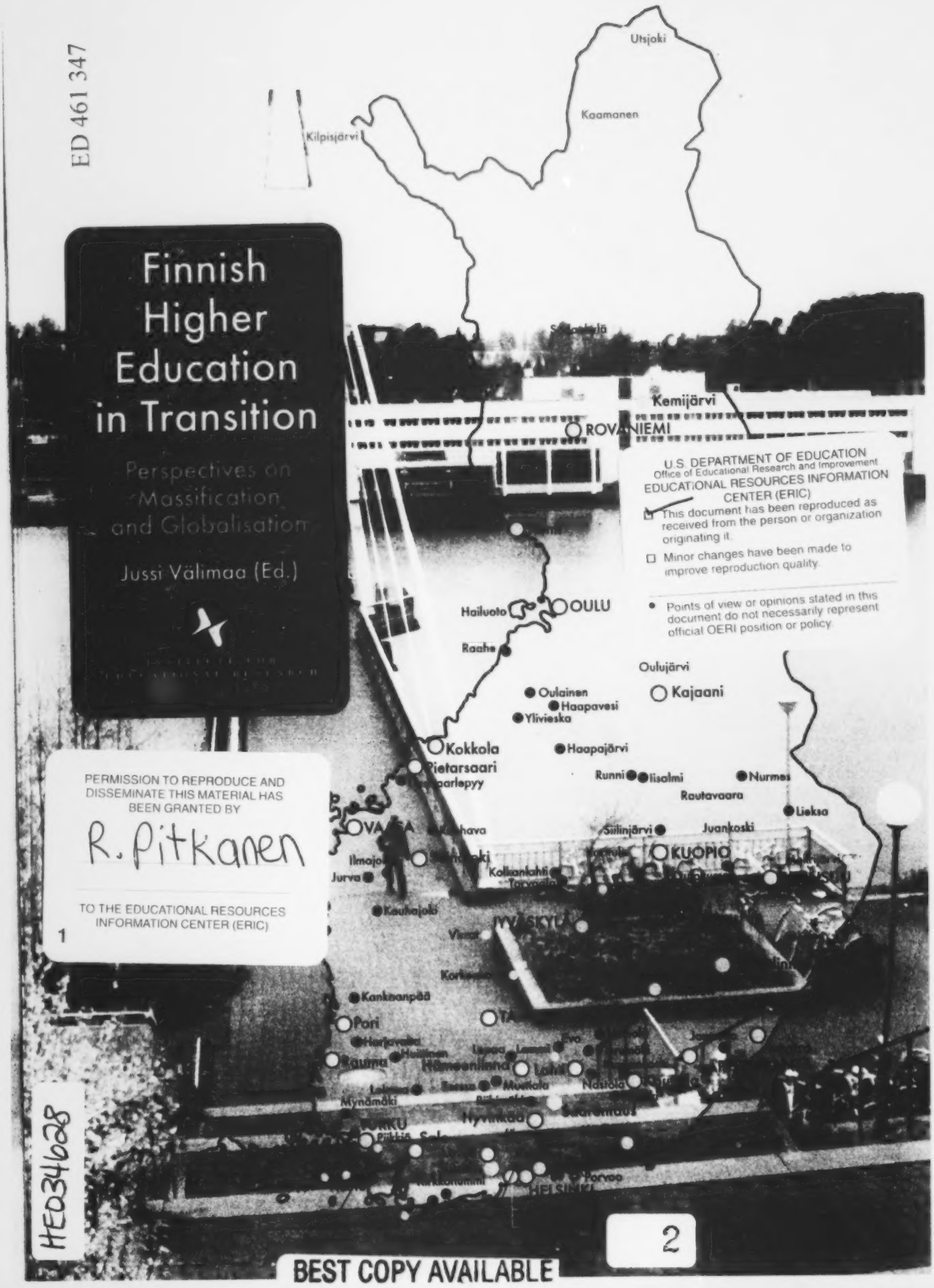
Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 461 347

Finnish Higher Education in Transition

Perspectives on Massification and Globalisation

Jussi Välimaa (Ed.)



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

R. Pitkanen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

HE034628

2

BEST COPY AVAILABLE

Finnish Higher Education in Transition

Finnish Higher Education in Transition

Perspectives on Massification and Globalisation

Jussi Välimaa (Ed.)

INSTITUTE FOR EDUCATIONAL RESEARCH
UNIVERSITY OF JYVÄSKYLÄ

THIS PUBLICATION
CAN BE OBTAINED FROM:
Institute for Educational Research
Customer services
University of Jyväskylä
P.O. Box 35
FIN-40351 Jyväskylä, Finland
Phone +358 14 260 3220
Fax +358 14 260 3241,
E-mail: terttu.airama@ktl.jyu.fi
www: http://www.jyu.fi/ktl/

© Authors and Institute for Educational Research
University of Jyväskylä

Cover and graphic design: Martti Minkkinen
Layout: Kaija Mannström

ISBN 951-39-1133-0

Printed by University Printing House
ER-paino Ky (covers)
Jyväskylä 2001

Contents

Introduction to the Book and its Themes 3
Jussi Välimaa

Chapter 1 GeoPolitical and Cultural Coordinates for Finnish History 7
Jussi Välimaa

Chapter 2 A Historical Introduction to Finnish Higher Education 13
Jussi Välimaa

Chapter 3 Analysing Massification and Globalisation 55
Jussi Välimaa

Chapter 4 Reflections on the Modern Mass University and the Question of the Autonomy of Thinking 73
Eeva Kallio

Chapter 5 Going to School at University? 91
Sanna Honkimäki

Chapter 6 Academic Life and the Pressure of Massification 111
Helena Aittola

Chapter 7 Doctoral Studies in the 1990s: From Elite to Mass Training? 139
Pentti Määttä

Chapter 8 The Open University in a Massifying Higher Education System .. 157
Ellen Piesanen

Chapter 9 Strategic Flow and Finnish Universities 185
Jussi Välimaa & Hannu Jalkanen

Chapter 10 Discussion: Finnish Higher Education Faces Massification and Globalisation 203
Välimaa, Aittola, Honkimäki, Jalkanen, Kallio, Määttä, Piesanen

Finnish Summary/suomenkielinen yhteenveto 223

JUSSI VÄLIMAA

Introduction to the Book and its Themes

When writing a book an author normally asks, who will be my reader? By contrast, a reader of the book often asks: why has this book been written? In the case of the present book, the first question is easily answered. We have written the book with an international readership in mind, hoping to meet the needs of an audience who would like to acquaint themselves with the basic historical contexts of Finnish higher education and also those of people interested in knowing more about the current changes underway and trends emerging in Finnish higher education. In other words, this book is meant both for the international community of higher education researchers and for those students and academics living in Finland who are more comfortable with reading English than Finnish.

Answering the latter question is, however, a more difficult task. I assume that academic books are written normally because the authors feel that they are addressing important topics and also because their studies have produced interesting information about and/or offer a new perspective on the world. These assumptions have been also our main starting points, even though it is for the readers to decide how well we have succeeded in our efforts. By 'we' I mean the authors who all work as researchers and senior researchers in the Higher Education Studies Research Team, based at the Institute for Educational Research, University of Jyväskylä. This book is our common endeavour. It is intended to describe not only what has happened in Finnish higher education or to pinpoint the recent changes but also to analyse and explain what these changes mean: what are the directions in which Finnish higher education is moving in its transition?

Two intellectual devices, the concepts of massification and globalisation, have proved helpful in structuring our academic enterprise. Both are contested terms and may bring into play many connotations, as will be discussed in chapter 3. They are, however, useful conceptual tools in that they organise our understanding both of the changes that have been reshaping the national higher education system (massification) and of changes taking place in the role of the nation state (globalisation). We began the process of writing this book with massification as our shared tool and starting point, whereas globalisation emerged as an important intellectual device only during the writing process.

Massification is, however, not a novel concept in analyses of Finnish higher education. In fact, the basic empirical research on the massification of Finnish higher education was published by Sakari Ahola in his penetrating dissertation *From Elite to Mass Higher Education* (1995). Here a critical reader might ask, why then repeat the same study once more? Our answer is simple: this is not the same study, neither as to its focus nor as to its outcomes. This is because our aim is not to study the massification of higher education from a sociological perspective so as to reveal the structures of selection underpinning Finnish higher education, but to analyse the implications for the functioning of Finnish tertiary education institutions of the fact that today we have a mass higher education system in Finland. We shall, therefore, approach the consequences of massification processes as they affect the university system internally, in terms of teaching and learning, doctoral education, the administration and management of universities.

In the opening chapter Dr Jussi Välimaa outlines the basic geopolitical and cultural coordinates of Finnish history. It is hoped that this chapter will help the readers to see Finnish higher education in its historical and cultural contexts. Chapter two concentrates on the history of Finnish higher education itself. In addition to being an introduction to the history of this most important national institution, the chapter contains also a great deal of contextual information which will not be repeated in the following chapters. The same design is applied in chapter three, which analyses the concepts of massification and globalisation as intellectual devices and social phenomena.

In chapter four Dr Eeva Kallio opens up a fresh perspective on massification and globalisation that is based on psychological considerations. In her study Dr Kallio discusses the nature of the autonomy of thinking in a mass

university. This topic is related to the organisation of teaching and learning in mass higher education; a topic which is addressed also by Ms Sanna Honkimäki in chapter five. Ms Honkimäki analyses changes in students' attitudes towards universities and university studies from the 1980s to the 1990s. In both of these articles the authors reflect on the problems facing those teaching and studying in a mass higher education system.

Chapter six, written by Dr Helena Aittola, and chapter seven, written by Mr Pentti Määttä, PhLic, analyse the same phenomenon – changes in doctoral education – from different perspectives. Dr Aittola uses generational lenses in an analysis of Finnish doctors' experiences of universities and of the preparation of their dissertations, whereas Mr Määttä focuses his attention on the changes that have remodelled doctoral studies during the 1990s. Owing to the nature of the problem, both authors discuss the relationship between science policy and changes in doctoral training in Finland.

In chapter eight, Dr Ellen Piesanen first describes the nature and functioning of the Finnish Open University system. In the empirical part of the article she analyses the operations and activities of the Finnish Open University from the perspective of its students. Dr Piesanen asks and answers the question, how are students using the Open University?

Dr Jussi Välimaa and Mr Hannu Jalkanen study changes in the dynamics of decision-making processes of Finnish universities. This perspective is motivated by a recent development in Finnish higher education legislation, the promulgation in 1998 of a new Universities Act (1997). The new law has the potential to change Finnish universities' decision-making structures and processes. The study analyses the reasons behind the universities' adoption of strategic thinking as a response to changing social and economic environments.

Last but not the least, I wish to express my gratitude to Mr Hannu Hiilos, who in checking our English has invested in our book more of his energy and intelligence than the regular office hours would have required.

9

Chapter 1

JUSSI VÄLIMAA

GeoPolitical and Cultural Coordinates for Finnish History

Between East and West

Historically speaking, it has been important that Finland was linked with the West European cultural sphere through the Catholic Church in the Middle Ages. The invasion of Finland by the kings of Sweden (and by the Roman Catholic Church) in the 12th century tied Finland culturally, politically and economically to the Western cultural sphere, to Western Europe, whereas the political powers of Eastern Europe (Novgorod and Russia) extended their influence to the Eastern parts of Finland, Carelia. The third cultural sphere whose cultural influences and economic interests have affected Finland originates in the German-speaking world. In this regard it is important that Finland is one of countries sharing the shores of the Baltic Sea together with Sweden, Denmark, Germany, Poland, Lithuania, Latvia, Estonia and Russia. However, it may be said that since the Middle Ages Finland has been a borderland between the cultures of Eastern and Western Europe, between the Roman Catholic (later Lutheran) and Orthodox Churches. According to Samuel Huntington (1998), even today Finland lies on the borderline separating the West and the East European cultures. Politically this position of a cultural borderland has meant that Finland has been a battleground between Swedish and/or Russian armies from the 12th to the 20th century. This has also shaped Finland's identity as the "westernmost East European country" and the "east-

10

ernmost West European country", as a Finnish sociologist Risto Alapuro has put it (Lehtonen 1999). This ambivalent cultural and political situation has been interpreted by the Finns both involving the role of a mediator between the two cultural spheres and as making Finland an outpost of the West.

Finland's position as a borderland ruled either by Swedish kings or by Russian emperors living in their distant capitals has had also social and political consequences. As regards internal administration, local administrators have been symbolic representatives of a powerful but in Finland physically absent authority. This seems to have contributed to an increase in the power of local authorities, and it certainly increased Finland's autonomy during the 19th century, when the Russian emperors wanted to secure the loyalty of this province which was close to St. Petersburg, the capital of Russia, and hence important from a military point of view (see Klinge 1997).

The cultural, political, and economic foundations of the Finnish nation state were laid during the 19th century. This involved also educational goals because the development of a civil society with democratically elected bodies is quite impossible if the people are unable to read and write. In the 19th century popular education was considered important from a social, political and cultural perspectives alike. The education of the people was one of the most central objectives of the nationalist movement, the Fennoman movement, whose aim was the creation of a nation state based on the Finnish language. As will be shown below, *education, and especially higher education, was at the core of these cultural and political processes* (see chapter 2 in this book).

The borderland mentality has contributed to an understanding of Finland as an outpost of the West against Eastern threats. This sentiment was especially strong during the 1920s and 1930s when the border between democratic Finland and Soviet Russia was not only a political but also an ideological and economic boundary. After the Second World War Finland retained its political independence and managed to remain outside the 'Soviet Empire' never becoming a socialist satellite state, even though the influence of the neighbouring superpower was felt strongly on all levels of society. As for Sweden, in cultural terms there has been antagonism especially in the sports, where nothing is as important as beating the Swedes in ice hockey or in the yearly track and field competition (*Finnkampen, the Finnish match,* in Swedish). However, culturally Finland feels closer to the East European mentality than

other Scandinavian countries. In short, Finland's relationship with its neighbouring countries has been politically ambivalent as regards Russia and culturally ambivalent as regards Sweden. (Lehtonen 1999).

Socially and geographically, Finland is a part of Scandinavia, of Northern Europe, and Finnish society has developed along similar lines to the other Nordic societies. Before industrialisation, which began by the end of the 19th century, Finland, like other Scandinavian countries, had a class structure topped by a weak feudal class. The nobility was largely an administrative nobility who held high positions in civil and military organizations but had no substantial landed estates. The second main historical context, related to the first one, is a strong tradition of independent peasantry. Peasants have never been serfs in Finland. Furthermore, farms have been quite small, leading to social situations where women have been as important as men to the economy of the farms. It is probable that this state of things has helped to create a social basis for equal rights between men and women also in cultural and political life. Thirdly, as a result of industrialisation during the 19th century there emerged a class of industrial and rural workers, finally organised into a social democratic party of the West European type after a civil war between the Reds and Whites in 1917–18.

Socially, Finland is connected with the other Scandinavian countries by demands for equal suffrage and social equality and by a traditionally strong social ethos manifested in the development of a welfare state after the Second World War. It is also noteworthy that in Finland, as in the other countries of Scandinavia, the concept of the state refers to a benevolent state which takes care of the citizens. As for education, public education has been regarded a natural means of organising education and also of solving the problems of education. Given the idea of a benevolent state and the fact of low population density (meaning small educational markets) the private education sector has been relatively weak in Finland.

Religious and Ethnic Homogeneity

After the Reformation during the 16th century there have been no significant religious minorities in Finland. Even today a majority of the population (87%) belongs to the Evangelical Lutheran Church. Similarly, in ethnic terms Fin-

land is among the most homogeneous countries in the world. There are no significant indegenious ethnic minorities with the exception of some 7 000 Sami in the North and about 10 000 Roma (gipsies) spread throughout the country. Linguistically, too, there is little diversity because Finnish is the mother tongue of over 90 per cent of the population. Historically, the largest linguistic minority have been the Swedish speakers, about 6 per cent of the total population at the turn of the third millennium. Language was, however, a hot political issue in Finnish society from the 1860s to the 1930s. As a consequence, there are now two official languages, Finnish and Swedish. The position of the Swedish-speaking minority is guaranteed in the constitution, which gives them right to attend Swedish-speaking educational institutions from comprehensive schools to universities. Given this religious and ethnic homogeneity, there have been no pressures for multicultural education even though the situation has been changing since the 1980s with growing numbers of immigrants arriving from Africa, the Middle East and Asia. At the turn of the 21st century there are some 100 000 people (about two per cent of the population) who are of other than traditional Finnish origin.

Political and Economic Developments in the 20th Century

Geographically Finland has always covered a large area, whereas population density has remained low. At the end of the 17th century there were some 300 000 inhabitants, and a good hundred years later (in 1800) still less than a million. During the 19th century the population more than doubled (2 660 000 inhabitants in 1900), while in the 20th century it has nearly doubled again. In 1999 Finland had 5 100 000 inhabitants, meaning that there are about 17 people per square kilometre. Together with the low population density the geographical conditions have made the organisation of education more complicated than in more densely populated countries.

Economically, during the 20th century Finland witnessed one of the most rapid transformations of economic structures in Europe. After the Second World War Finland was a rural society with almost 30 per cent of the population working in agriculture and forestry. The 1950s and the 1960s saw rapid changes in the structure of national economy, leading to dramatic internal

migration from rural areas to urban communities (and also to Sweden). Socially speaking, in the course of years Finnish society changed from an East European type of agricultural society to a West European industrial society. By the 1990s Finland was one the most industrialised countries in Europe. It has even been said that Finland provides amodel of a society which has already entered the information society. Recent success stories in the sector of information technology (such as NOKIA) support these arguments.

Summing up

Geographically Finland belongs to Fennoscandia but politically it has always lain between two stronger nations, Swedes in the west and Russians in the east. This geographical situation has led to political dependency on stronger neighbouring states, first on Sweden (from the 12th to the 19century), and then on Russia (1809–1917). The development towards an independent nation state began in the 19th century, when Finland was a part of the Russian Empire as an autonomous Grand Duchy. Finnish political frames of action were changed before the First World War by the introduction of universal suffrage in 1906. This was also a time when the Russian Empire was collapsing and the Finns inspired by the ideologies of nationalism and socialism were resisting Russian rule. During the First World War Finland achieved independence through a bitter civil war, which divided the nation and society into the victorious "Whites" and rebellious "Reds" for the next 20 years. During the Second World War the nation was united again when Finland fought against the Soviet Union, first without allies (in Winter War, 1939–40) and then together with Germany (in the Continuation War, 1941–44), and finally against Germany (in the War of Lapland, 1944–45). After the Second World War Finland declared itself a neutral country, managing to stay outside NATO and the Warsaw Pact. European unification reached this northernmost region of Europe in 1995 when Finland joined the European Union.

References

Huntington, S.P. 1998.The clash of civilizations and the remaking of world order. London: Touchstone.

Klinge, M. 1997. Keisarin Suomi (Emperor's Finland). Helsinki: Schildts.

Lehtonen, T. (Ed.) 1999. Europe's northern frontier. Perspectives on Finland's Western identity. Jyväskylä: PS-Kustannus.

Chapter 2

JUSSI VÄLIMAA

A Historical Introduction to Finnish Higher Education

University Civilizing People: The Establishment of the University of Turku

The history of Finnish higher education began with the establishment of the University of Turku with the of the name Royal Academy of Åbo in 1640. At that time Finland was a part of the Kingdom of Sweden, a protestant superpower that in practice controlled the traffic on the Baltic Sea. Wishing to bolster the intellectual capacity of the Kingdom and to train civil servants for the King, the Swedes strengthened existing universities (Uppsala and Greifswald) and established new ones in Sweden (Lund 1657), Estonia (Tartu 1638) and Finland. The University of Turku was the first national higher education institution in Finland in the sense that it trained civil servants for the Kingdom, thus replacing the former practice of sending Finnish students abroad. During the Middle Ages the most famous destination had been the University of Paris, but it was replaced by German (Protestant) universities when the Reformation closed the students' route to Catholic universities in the 16th century (Nuorteva 1999).

The practical aim of the Royal Academy was to prepare civil servants to administer the Kingdom and clergymen to serve the Lutheran Church. The Royal Academy had four faculties, covering **theology, philosophy, law and medicine**. Following the traditions of other Nordic countries, the most pres-

tigious was the faculty of theology with three professors. The Faculty of Philosophy was the largest with four professors, whereas the faculties of Law and Medicine had only one professor each.

From a political perspective it can be said that the foundation of the university was one aspect of an internal policy whose aim was to unify the newly acquired territories of the Swedish Kingdom under Swedish rule. Other important religious and political objectives involved the defence of a dogmatic Lutheran version of Christianity against Roman Catholics and other Protestant churches.[1]

It was a crucial factor in shaping the future social roles of higher education was that the cultural point of departure was civilizing the ordinary people in the sense Norbert Elias has defined this process of socialising people into members of a civil society (Klinge 1987). This goal is reflected in the University's founding statutes, where the main purpose of the new institution was defined in the introduction as follows:

> WE CHRISTINA, Queen of Sweden ... declare that ... through education good administration and order in society, good knowledge of the true God leading to the realisation of honorable, virtuous and Christian life will be attained ...and ... we desire to promote the better cultivation of the liberal arts in order to increase the fame and beauty of the Finnish Grand Duchy ... (free translation J.V. after Klinge 1987, 82–84).

The statutes reflects also the change that had taken place in the status of universities. During the Middle Ages they were universal institutions serving chiefly the universal institution above all, the Catholic Church. Modern universities, by contrast, became national institutions serving national needs, often defined by national rulers (see Neave 2001; Scott 1995).

National institution should, however, be understood in the historical context. In the 17th century national institutions were institutions of the King-

[1] Before the 20th century the Lutheran Church (and religion) dominated practically all functions of social life in Finland. Religion was the social cement. In addition to creating the normative and moral basis of society it combined the functions now represented by ideologies, political parties, even lifestyles and – of course – religion and the Church. The Lutheran Church was also essentially important to the functioning of the Kingdom because in rural areas local administration was organised through parishes. Local meetings were normally chaired by ministers. In addition, all royal declarations and other official information was made known by Lutheran ministers during religious services.

dom of Sweden and the King. It should also be noted that during Swedish rule Finland was more a geographical than a political entity. Culturally important was, however, that in the 18th century young Finnish scholars begun to study Finnish history and folklore, thus laying the foundations of an emerging Finnish nationalism.[2] Therefore, in cultural terms, it may be said that under Swedish rule the Royal Academyprovided a cultural basis for combining the feelings of Finnish local patriotism with cultural nationalism. Many 18th-century Finnish academics, such as Daniel Juslenius and Henrik Gabriel Porthan, studied Finnish history and culture, thus following the European intellectual trends of their times. However, as has been pointed out by Lehtinen (1989), they developed their cultural ideas about the Finnish people without having any political purposes.

The main task of the Royal Academy was to train Lutheran clergy and civil servants to administer the Kingdom and the Church. How far did the Academy reach its goals? According to Kallinen (1995), as many as 40 to 50 per cent of the students became clergymen of rank or other while only three to six per cent ended up as officials or local judges. Kallinen concludes that the demand for civil servants seems to still have been relatively limited after all.

The number of students remained quite small by modern standards, 200–400 students in one academic year.[3] About half the students came from the

---

[2] The universities were challenged by the Scientific Societies which appeared during the 17th century. These new societies – such as the Royal Society in Great Britain established in 1660 or even the Royal Academy of Science founded in Turku in 1739 – were interested in new scientific perspectives and methods which questioned the principles of medieval science, the traditional scholastic science based on Thomism as defined by Thomas Aquinas. The new "Baconian science" which focussed on empiricismand experimentalism, Cartesian philosophy and Copernican cosmology posed a challenge to European universities, which traditionally had educated clergy and lawyers. Universities were not, however, willing to make radical changes in curricula which served their traditional purposes. In this context, the reluctance to revise the curricula in the University of Turku is not an exception to the rule."The slowness of change at Turku is more or less an illusion caused by comparison not with other universities but with other factors which contributed to or followed from the rise of new science" as Maija Kallinen (1995) puts it.

[3] The student numbers are estimates. In the 17th century the university had 60–80 newcomers per year, but all of them did not study actively. In the 18th century some 40 per cent of the students were students in name only (Strömberg 1987).

bishopric of Turku (the western part of Finland), between a half and a third from other parts of Sweden. As to their social background, the largest proportion of students at Turku came from the homes of clergy or professors. Between 1640 and 1709, 15–26 per cent of all students were clergymen's sons. About 5–11 per cent of the students were sons of tradesmen or craftsmen, only 3–8 per cent sons of lower clergy or of teachers. Peasants' sons formed 3–5 per cent of the student body, which was about as much as the proportion of students of noble descent (3–6%).[4] (Strömberg 1987; Kallinen 1995).

A University in the Making of a Nation State: The Imperial Alexander University

Sweden lost Finland to Russia during the Napoleonic wars fought in 1809–12. Alexander I, the Emperor of Russia, granted Finland the status of a Grand Duchy at the Diet of Porvoo in 1809. Finland was given autonomy in internal administration, including financial and religious matters. The Finns were allowed to keep their Lutheran Church and religion. Continuing the Swedish traditions, education was considered a religious matter also because the Church took over basic education in rural areas.

It may be said that at the time when the country was annexed to the Russian Empire, Finland was more a geographical than a political concept. The development of Finland as a political unit was strongly encouraged by the political status of an autonomous Grand Duchy. The autonomy lasted about 100 years during which time Finland developed from an "incidental byproduct of wars between Sweden and Russia", as Thaden (1984) puts it, into an independent nation state that achieved its political independence after the First World War. Throughout the 19the century, the university in particular and education in general played an essential role both in the political state building project and in the cultural nation building project (see Alapuro 1988).

[4] The statistics are, however, only indicative, because 61–40 per cent of the students' fathers social status is unknown.

From Royal Academy to the Imperial Alexander University

The University of Turku (or Royal Academy of Åbo) was among the first Finnish institutions to show its loyalty to the new ruler, Emperor Alexander I. In return, the University of Turku (now with the name Academiae Imperialis Aboensis) was strengthened both institutionally (it was granted an independent status) and in practical terms in 1811. This involved the establishment of six new chairs (one each of theology, jurisprudence, and medicine, and three in the Faculty of Philosophy). This meant that the university's resources increased by almost a third (the number of professors grew from 14 to 20). A more important addition to its resources was, however, the funding of twelve new associate professors (*apulainen, assistant*) in addition to the seven existing posts. These new associate professorships were teaching posts, thus enhancing the level of education. Further, the university was given funding for a lecturer in the Pedagogical Seminar and for seven university teachers (of English, French, German, Russian, drawing, fencing, music and dancing). Especially fencing and dancing were skills required by sons of the nobility. These "subjects" had first appeared in the 18th century. Moreover, university administration was strengthened by establishing six new administrative posts. The Emperor also donated money to the University Library and its collections and to the university's building activities. (Klinge 1989, 1997).

There was a new conception of university influenced by German humanism (known later as Humboldtian ideas) that emphasised the importance of academic freedom and students' moral growth during their studies. It was important for the future development of the university that the model of higher education adopted in Finland was not based on the French idea of higher education system with specialised and vocationally oriented higher education institutions in addition to traditional universities. The role of the Imperial Academy of Åbo also began to change in the early 19th century. Its location in Turku, on the west coast of Finland close to Sweden, proved a problem because the institution continued its Swedish traditions. Accordingly, for two different but interconnected reasons the Finnish authorities – both Finnish state officials and the Russian Governor-General – interpreted minor student unrests in the 1810s and the 1820s as a political threat to Finnish autonomy. The Finnish bureaucratic elite saw the student unrests as harmful because they might endanger Finland's newly acquired autonomous status. For the

Russians they represented a real political danger because since 1817 after the establishment of a new civil service examination *(virkamiestutkinto)* the Imperial University trained all state officials. The reform was related to the fact that Finnish administration had been enlarged and developed during the autonomy, but there was also a cultural and moral aspect. It was repeatedly stressed that civil servants should set the common people a moral example: they should be honest and well-mannered citizens. These objectives indicate, of course, that not at all civil servants followed these moral codes; otherwise they would not have been emphasised so much. However, it meant also that the behaviour of university students was paid special attention because of their status as the future officials of the Grand Duchy (Klinge 1989, 1997).

The Russians needed to be sure that this new bureaucratic elite would be loyal to the Emperor. Student opinion was closely inspected also because during a period when there were no free newspapers and no meetings of the Diet, students represented "Finnish people" or at least "public opinion" of a kind.

In this context the university had a special importance because Finnish university students – like students in other European countries – represented a potential political threat. They had to be constantly controlled. As a social sphere, however, the university provided a testing arena for future political leaders because all other manifestations of civil society (freedom of speech, freedom of assembly and freedom of association) were forbidden more or less throughout the 19th century but especially before the 1860s. Consequently, the Emperors kept on eye on what happened in the only university in Finland.

The political situation of the Imperial Academy of Åbo began to change when Turku was destroyed by the Great Fire of 1827. Using the damage caused by the fire as an excuse, the Emperor moved the university to Helsinki, the new capital of Finland, and renamed it the Imperial Alexander University. The leading motive behind the move was to increase the political control of university and especially of the students. (Klinge 1989).

The structure of studies remained the same after the reopening of the university. There was a problem with, however, the lack of a system of education in the modern sense of the concept. That is, students were allowed to enter university without having taken any kind of final school examination. In the 1830s as many as 30 per cent of the university students had been taught by private teachers. As a result, their cognitive level varied very much. A traditional solution to the problem was a university entrance examination (*yliopp-*

lastutkinto), which meant that each new student was examined by a university professor before he was allowed to enrol. This examination had nothing to do with the Matriculation Examination (also *ylioppilastutkinto* in Finnish) given by the grammar schools (*gymnasium, kymnaasi*) which had the right to send their pupils to the university (Klinge 1997).

In the 1840s there was a socially recognised need to reform not only the school system but also university teaching, because society was gradually changing. One of the responses was the establishment of a Chair of Practical Theology in 1846 to prepare the way for the practical training of priests. The first professor of education (pedagogics) in Scandinavia was also nominated in 1852. These new chairs prepared the ground for an extensive reform of the university implemented in the 1850s. The university reform of 1852 had two objectives. Imperial statutes reorganised firstly the structure of student associations, turning loose student nations (*osakunnat*) into student faculties (*ylioppilaiden tiedekunnat)* more strictly controlled by their professors. The second main objective was to improve the quality of university teaching and research. This goal was reached by separating the humanities and the science curricula. The reform abolished the obligation to study 13 disciplines (from Hebrew to physics) before a student could finish his master's degree. Since then students take either the humanities or the sciences. The reform helped to improve the quality of research, especially in sciences. The requirement that dissertations must be written in Latin was also revoked thus opening the way for dissertation in Finnish.[5] An important political victory was the fact that the Universi-

[5]The nature of a dissertation has changed over time. At the Royal Academy in Åbo (17th and 18th centuries), there were two kinds of dissertations, inaugural theses (pro exercitio) which were exercises in the tactics of argumentation (such dissertations were were normally written by professors), and master's theses (pro gradu). Doctoral theses were extremely rare, the title "Doctor of Philosophy" being introduced only around 1800. Master's theses were normally written in close cooperation with the professor. A student was responsible first of all for the printing costs, secondly for defending his thesis against an opponent, another student. All this makes sense when we realise that in the 17th and 18th century the main function of a dissertation was pedagogical. That is, the main aim of defending a dissertation was to teach students to master the art of arguing, to use both rhetoric and dialectic in a public debate. Independent thinking was not encouraged. This is also the main difference from modern dissertations, which are expected to produce new knowledge in their various academic fields. In the 17th century dissertations were rhetorical exercises. The theories articulated in them were, howev-

ty of Helsinki remained a unified institution instead of being divided between various towns. This also meant that the university became more of a Finnish and national institution with its own statutes, separate from the Russian higher education system, which was adopted from France and was based on a separation between research academies and teaching-oriented universities. The reform also ended the persistent demands by Russians that Russian should be introduced as a teaching language at the university. There were, however, chairs both of the Finnish and the Russian language even though the teaching language remained unchanged, being mainly Swedish. (Klinge 1989).

The reforms of the university statutes were implemented in the historical context of the European revolutions of 1848–49, when students and professors (and universities) tended to be seen as potentially revolutionary groups (and institutions). There was a plan never implemented that universities in the Russian Empire would be closed and turned into vocational education institutions. Furthermore, it was suggested in Finland that the right to attend university should be strictly controlled and that only sons of the upper classes should be granted the right to study there. The proposal was dropped, but the question of who should have the right to go to university was an important one both ideologically and politically. It was important also because the university was practically the only channel of upward social mobility in the hierarchical society of Finland, based on legally defined social groups, estates. The university reform was accompanied by a regulation that allowed only those who had completed grammar school (*gymnasium/kimnaasi* or *lyceum/lyseo*) to enter university. This put an end to a long tradition of enrolling at university without attending any school. Especially the sons of nobility (and of wealthy families) were taught by private teachers, after which they went to university. During the first half of the 19th century as many as 60 per cent of the students came from seven schoolswhich were allowed to send students to university (Strömberg 1989). This also meant that the academic quality of the students began to improve during the 1850s. Fennomans, a Finnish-speaking cultural group which developed also to a political party, considered it impor-

---

er, regarded as true. As Kallinen (1995) emphasises, learning of this kind was perfectly suited for the requirements of secular and clerical authorities. "Students who learned to follow the method without speculating too much themselves undoubtedly became competent and docile servants for both the church and the state" (Kallinen 1995, 21).

tant to establish Finnish-speaking grammar schools because creating a Finnish-speaking university would be possible only when students speak Finnish as their mother tongue.

These issues are revealing also from modern perspectives. First, in any given society access to higher education is normally a result of political decision-making because higher education has always been important in the production and reproduction of social structures. Secondly, the orientation of a national higher education system (academic vs. vocational emphasis) shows the importance of national solutions concerning the training of civil servants, professionals and qualified labour force. A third perspective is related to the functioning of a national education system as an entity. That is, a society can hardly have an efficient higher education sector unless there is efficient primary and secondary education. Therefore, reforms in higher education are normally related to reforms of other levels of national education systems.

As to Finland the system of education was reformed thoroughly from the 1860s onwards. New systems of elementary and grammar schools were introduced. A socially important aspect of the reform was that the new schools catered for the Finnish-speaking majority of the nation. A most important precondition for and at the same time also a consequence of this chosen policy was the establishment of teacher training seminars. The first one was founded in Jyväskylä in 1863, and by the beginning of the 20th century there were already eight such institutions. They provided a route to higher education mainly for sons and daughters of peasants, workers and other lower-class people even though they were not regarded as higher education institutions at the time. These institutions were originally established as two-year colleges but were developed into three-year teacher training seminar in the 1930s (Isosaari 1989; Nurmi 1995).

On the Political and Social Significance of University

If we accept Thaden's (1984) suggestion that Finland is "an incidental by-product of wars between Sweden and Russia during the 18th and at the beginning of the 19th centuries", then we must ask further how and why this incidental geographic area come to coalesce into a nation state in the course of a hundred years?

It has been argued that it was the development of the national economic structure during industrialisation that laid the basis for an independent nation state because it was during the 19th century that Finland emerged as an economic unit with a territorial division of labour and an autonomous economic core (Alapuro 1988). In addition to these economic processes, however, the political birth of the Republic of Finland was made possible by the rise of interwoven cultural and political movements. On a conceptual level these movements were at the core of the cultural nation-building process and the political state-making process (Alapuro 1988).

The spokesman of the Finnish nationalist movement, J.V. Snellman – Professor of Philosophy at the Imperial Alexander University and later a senator in the national government – formulated the ideological aims of the Fennoman cultural movement in the spirit of Hegelian tradition developing the "spirit of history" into the concept of "national spirit". According to Snellman, the development of a nation will be fulfilled through the state. In his philosophy the state was a sphere where individuals fostered their morality and promoted the common good (Alapuro 1987). A nation was to Snellman primarily a moral entity. It was culturally radical and politically significant to maintain, as he did, that "without a language there can be no nation". This was a radical cultural statement because practically all cultivated Finns (including Snellman) spoke Swedish as their mother tongue. Finnish nationalism was initiated as a cultural movement by the university professors and students, after which it expanded into a political movement supported by the estate of burgesses and that of the clergy (Klinge 1997). Politically the Finnish nationalists were known as Fennomans. Culturally the Fennomans had two goals. First, they promoted the education of the nation and, secondly, they wanted to nationalise the educated (Rommi & Pohls 1989). As a result of this nationalist ideology, many Swedish-speakers became Fennomans, learned to speak Finnish and even translated and/or changed their names into Finnish. The Russian authorities did not obstruct Fennomans because the movement was directed against the Swedish-speaking elite, not against Russians (Klinge 1997). It has been argued that Russians even supported this development because it increased the separation between Finnish-speaking Finland and Sweden (Ylikangas 1998; Virtanen 2001).

It was important to Finnish higher education that many of the leading figures of the Fennoman movement worked at the Imperial Alexander Universi-

ty. The university was thus providing a social forum where different views could be debated and different people could interact with each other. In the 19th-century Finland it was practically the only place where such interaction was possible, and it was also the place where the social elite was educated. From a political perspective it is obvious that the student associations served as models for political parties, as has been argued by Klinge (1992), because student nations became the nuclei of the later party organisations. Furthermore, from the perspective of civil society it has been argued that "it was in the academic setting that the idea of civic activity outside the bureaucratic system, i.e., in associations, the free press, and parliamentary politics, finally emerged and developed" (Klinge 1992, 37). Consequently, university professors and students not only published books, and later a newspaper to promote the enlightenment of common people but also learned Finnish themselves.

Owing to the small size of the student population, the students probably got to know each other, especially because of the social activities in the student associations, based on the Finnish provinces, known as nations. The average student population at the university was 443 men between 1818 and 1872, while between 1872 and 1907 the average number of active students was 1011 (Strömberg 1989). Women were allowed to enrol in the 1880s, even though the first female student (Emma Åström) began her studies as early as in the 1870s. The students' social background did not change much between 1808 and 1870. The majority of them (63–65%) came from upper-class families, in other words from families whose members held academic degrees. The largest proportion of students were sons of clergy (27–29%), with sons of state officials the second largest group (22–27%). The number of students of noble birth fell from 14 to 3 per cent between 1808 and 1868. The figures for students from lower classes remained about the same (35–37%). Sons of merchants and craftsmen accounted for about 14–15 per cent, sons of lower clergy for 5–6 per cent and sons of peasants and workers for between 8 and 10 per cent. A comparison with the previous century reveals that the proportion of lower-class students was smaller than what had been the case between 1760 and 1790. At that time the proportion of both peasants' sons and burghers' sons in the University of Turku varied between 15 and 20 per cent (Strömberg 1989). These figures indicate the social stagnation of the Finnish Grand Duchy before the 1860s, but they reflect also efforts to reserve the best education for

the highest social classes. In an estates-based society, where every estate had its privileges, this was a rational policy.

The situation began to change during the 1870s, when an improved school system (more Finnish-speaking grammar and elementary schools) and infrastructure (especially the new railroad system from the 1860s onwards) and economic development enabled new social groups to send their sons and daughters to university. Gradually the number of students of the previous dominant groups (priests, state officials, military officers) decreased while the number of those new social groups (teachers, lower civil servants, merchants, craftsmen) began to grow with also the sons of peasants and workers enrolling in increasing numbers. During the first decade of the 20th century the sons of state officials, military officers, university teachers and clergy accounted for 24 per cent of the university students as against 49 per cent in the 1870s. In the period 1906–15 almost half the university students (44%) came from what may be called a new middle class as against 28 per cent in the period 1867–75. (Strömberg 1989).

University was the main channel of social rise in Finland's estates-based society, especially when we look at this phenomenon from the perspective of the upper classes with people from the lower estates entering their ranks via university studies. However, seen from the perspective of the lower classes the picture is less clear, as was emphasized by Allardt (1966), because of the difference size between these social groups. Moreover, in many cases students from the lower estates studied for shorter periods than upper-class students, taking lower academic degrees, which also made it more difficult for them to launch a career in public administration. Between 1810 and 1852 only a tenth of them eventually became civil servants; by contrast, of the sons of clergy 25 per cent entered the civil service and 40 per cent the Church. These figures reflect the social reality of the first half of the 19th century when the upper estates were unwilling to allow university to become a channel of upward social mobility. A good example on the dominant attitudes was presented by Vice-Chancellor J.M. Nordenstam, who in the 1860s considered raising tuition fees in order to prevent lower classes from entering the university.

Accordingly, the national university has been an important locus both politically and culturally in the making of Finnish national identity. It is therefore probable that this social role of university has strengthened the high social status that universities in particular and higher education degrees in gen-

eral enjoy in Finnish society. At the same time, this nation-building process was supported by a rising group of Finnish-speaking academics thus emphasising the importance of university in a definition of the nation based on nationalist ideas on a civil society. This definition also had its consequences. It has been suggested that the Hegelian tradition to which Fennomans adhered created an understanding of university as a cultural entity representing mainly of *"geisteswissenschaft"* rather than the more practically oriented empirical sciences. After public debates towards the end of 19th century this general view of the role of university also resulted in political decisions that barred the more practically oriented disciplines(technological and business sciences) with the exception of the agricultural and forest sciences from the Imperial Alexander University. This, in turn, led to the foundation of special institutions providing higher technical and business education (see Ahola 1995 and Michelsen 2001).

Higher Education in the Republic of Finland: the Logic of Expansion

The period when Finland was an autonomous Grand Duchy was a time of cultural, political and economic development of Finland and the Finnish nationality. Higher education, and especially the only university in Finland, the Imperial Alexander University, played a central role in all these social processes. The period was important also to the development of the Finnish idea of university. It is no historical exaggeration, perhaps, to say that essential in this Finnish idea of university was, first, the notion that university is a national institution. Secondly, university and higher education were considered important aspects of the development of the nation and nation state. Thirdly, it was also realised that access to education – including higher education – is an issue to be decided by politicians not by the academics themselves. These interpretations of the idea of university have had continuity also in the 20th century; the issues that they involve have been adressed at different points of time on the basis of variety of political decisions.

The history of Finnish higher education is the history of its expansion during the 20th century. There has been growth in the number of higher education institutions, students and academic staff, as can be seen from Tables 1

and 2 and Figure 1. While these developments in Finland represent a typical rather that a unique story in the Western cultural sphere, the explanatory factors linked with historical contexts are specifically Finnish. The expansion has led not only to more institutions, but moreover to a range of institutions located all over the country and responding to a variety of social, economic and cultural expectations and needs.

To explain this development it is useful to approach the subject from perspectives opened by the social sciences instead of describing the expansion only historically.[6] In sociological terms, thereare five socio-political processes which have, in interaction and in various combinations, contributed to the expansion of Finnish higher education during the 20th century. These contributing social forces are:

1) political struggles between Finnish-speakers and Swedish-speakers
2) industrialisation and labour market needs
3) Academic Drift
4) regional policy principle
5) the making of the welfare state.

Table 1. The number of students in Finnish higher education, 1900–1999. Sources: Nevala 1991, KOTA data base, AMKOTA data base.

Year	Students in universities	Students in polytechnics	All students
1900	2 300	-	2 300
1910	3 100	-	3 100
1920	3 500	-	3 500
1930	6 900	-	6 900
1940	9 500	-	9 500
1950	15 000	-	15 000
1960	25 300	-	25 300
1970	60 700	-	60 700
1980	84 200	-	84 200
1990	110 700	-	110 700
1999	151 900	96 500	248 400

Table 2. University teachers and other staff in Finnish universities, 1981–1999. Sources: KOTA data base, Välimaa 2001.

	1981	1985	1990	1995	1999
university teachers on budget funds[1]	6.500	7.200	7.800	7.600	7.300
other staff on budget funds[2]	-	6.700	8.000	9.000	10.200
other staff on external funding[3]	-	4.700	5.200	7.500	9.600

[1] Professors, associate professors, lectures, senior assistants, assistants.
[2] Researchers (14% in 1999) and other, mainly administrative personnel.
[3] Project researchers, administrative and assisting personnel.

Historically first comes the combination of the first and second social forces. Industrialisation began to create pressures to develop technical and business education to train professionals for the growing industrial and commerce enterprises by the end of the 19th century. Technical education was initiated in the 1870s at Helsinki Polytechnic School, later Helsinki Polytechnical Institute. This institution gradually developed into a college of technology (in 1908) and finally reached the status of Helsinki University of Technology in the 1960s. The social dynamics created by industrial expansion have continued throughout the 20th century even though their influence was perhaps most visible at the turn of the century when it was decided not take technical education to the Imperial Alexander University. The commercial world followed the same developmental rationale: first there appeared an institution offering two-year programmes, which was then developed into an institution

[6] The historical descriptions of Finnish universities can be found from: The University of Helsinki (Klinge 1987, 1989, 1990); Helsinki University of Technology (Wuolle 1949; Liesto 1988); Helsinki School of Economics and Business Administration (Saarsalmi 1961; Michelsen 2001); Swedish School of Economics and Business Administration (Westerlund 1984); Åbo Akademi (Nordström 1968); Business School at the Åbo Akademi (Sandström 1977); Turku School of Economics and Business Administration (Perälä, 1975); The University of Turku (Jäntere 1969; Perälä 1970, 1977); The University of Jyväskylä (Kuusi 1967; Rassi 1974 and Kangas 1992) in Nevala (1999).

providing three-year training in commerce and business administration that achieved university status in the 1970s. However, together with these developments there were ongoing political struggles between Finnish speakers and Swedish speakers in Finnish society. Therefore, in the context of the cultural and political struggle it was rational to establish, around 1910, separate business schools to serve the Swedish speakers (Svenska Handelshögskola) and Finnish speakers (Helsinki School of Economics and Business Administration). The same social dynamics contributed to the establishment in the early 1920s, in a single town, of one university for the Swedish speakers (Åbo Akademi) and another for the Finnish speakers (The University of Turku). In the University of Helsinki, the largest and most prestigious university in the country, this language struggle led to a situation where there are separate chairs for Swedish- and Finnish-speaking professors. It should also be kept in mind that Finnish citizens have the constitutional right to be taught in their mother-tongue, whether Swedish or Finnish. However, the social dynamics created by the language struggles began to wane during the 1930s after the foundation of these two universities and political compromises in the University of Helsinki. As Kivinen and Rinne (1996) maintained, the foundation of these two universities "can be seen as the outcome of higher education policies practised by public movements with a national focus". Between the two world wars only additions to these institutions were the College of Veterinary Medicine and the College of Social Sciences *(Yhteiskunnallinen korkeakoulu)*.

Between the two world wars Finnish higher education was an elite system. Studying was possible mainly for the more prosperous social classes and the number of higher education students remained low (see Table 1). Social exclusion from higher education took place in then school system where one needed money to complete upper secondary school. The lack of public financial aid for students increased the exclusionary effect (Nevala 1999). Furthermore, university professors belonged to the highest level of Finnish society, and from the 1920s to the 1940s many of them served as ministers (Klinge 1992).

Higher Education and the Welfare State Project

Simultaneously with these societal, or "external" factors, higher education institutions have been affected also by an internal process which may be called

called 'Academic Drift' (Clark 1983). According to Kivinen and Rinne (1996) Academic Drift "can be identified as the tendency for groups lower in hierarchy to emulate the education and training of higher-status groups". Following the rationale of this social dynamics higher education institutions, their staff and students, aim to enhance the social status of the institution so as to gain more resources. In Finland, as a social force Academic Drift surfaced mainly after the Second World War. During the most rapid period of expansion in the 1960s and the 1970s some former teacher training colleges succeeded in raising their social status by becoming universities (the University of Jyväskylä, and the University of Joensuu to some extent), while the College of Social Sciences became the University of Tampere. Often the efforts to establish a university in the region were initiated by summer university associations (in Jyväskylä, Tampere, Lappeenranta, Seinäjoki) (see Välimaa, Piesanen & Jalkanen 2001).

The expansion of Finnish higher education towards a mass higher education system began in the late 1950s, The expansion was closely related to and at the same time one of the results of a welfare-state agenda supported by major political parties. Creating equal educational opportunities – including equal access to higher education – became one of the most important objectives on this agenda, implemented over a period extending from the 1960s to the 1990s. According to political arguments presented at the time, the main purpose of the Act on the Development of Higher Education (1967) was to foster social and geographic equality by improving access to universities and mobilise reserves of talent in the rural areas with a view to reaching the level of development displayed by the other industrialised countries (see Välimaa 1994). The law also assured the growth of resources during this period characterised by the rapid regional expansion of the Finnish higher education system.

The expansion of higher education was supported by a regional policy principle (*aluepolitiikka*). It opened the way for political lobbying organised through regional pressure groups (including members of Parliament representing their regions, representatives of regional communities, and industrial and business enterprises) to establish a university in the region. The founding of a university was seen not only symbolically but also culturally and economically important to the development of the given region. All major provinces were allowed to establish a university of their own in the 1960s, the 1970s, and the 1980s (Figure 1.).

Figure 1. The expansion of higher education in Finland: Finnish universities' main and branch campuses with teaching provision are shown with large grey circles and capital letters. Small grey circles indicate a municipality with only a university research unit. The main campuses and branches of polytechnics offering teaching are indicated with black circles.[7]

BEST COPY AVAILABLE

In 2001 there are 20 higher education institutions located in all parts of Finland. These include **ten multi-faculty institutions** (University of Helsinki, University of Joensuu, University of Jyväskylä, University of Kuopio, University of Lapland, University of Oulu, University of Tampere, University of Turku, Åbo Akademi University, and University of Vaasa), **three technical universities** (Helsinki University of Technology, Lappeenranta University of Technology, Tampere University of Technology), **three schools of economics** (Helsinki School of Economics and Business Administration, Swedish School of Economics and Business Administration, Turku School of Economics and Business Administration) and **four art academies** (Academy of Fine Arts, University of Art and Design, Sibelius Academy, and Theatre Academy). Finnish universities grant professional degrees, bachelor's degrees, master's degrees, licentiate degrees and doctoral degrees. All Finnish universities are public institutions in the sense of the traditional continental model (Clark 1983). They are autonomous institutions but subordinated to the Ministry of Education.

During the most rapid period of growth the logic of expansion was thus supported by internal academic interests (academic drift), by industrial and commercial needs, and by political processes involved in the making of the welfare state. The mechanism of expansion was maintained by powerful actors operating in the field of higher education. It was during this period of expansion that conscious higher education policies, expressed through legislation, emerged in Finland. The first Act on the Development of Higher Education covered the years from 1967 to 1986.

---

[7] The map does not include those 196 municipalities which have Open University facilities because there were technical problems with locating all of them on the map. However, when we add up every municipality where there can be found either a university, a polytechnic or an Open University unit, we see that there is some kind of higher education institution -with either teaching or research functions- operating in 61.6 per cent of all Finnish municipalities (276 municipalities with higher education institutions or facilities out of a total of 448 municipalities existing in Finland in 2001).

From the 1970s to the 1990s

The rapid expansion of the educational system in the 1960s and the 1970s highlighted also the need to reform the traditional university practices. In response, many reforms were initiated by the Ministry of Education in the spirit of a centrally-steered system of higher education in the 1970s and the 1980s. During the 1970s the internal administration of all Finnish universities (with the exception of the University of Helsinki) and degree programmes were reformed (the latter being known as the degree reform). The academic communities protested, especially against the degree reform. On the one hand, it was seen as a threat to the Humboldtian idea of university. On the other hand, it was criticised for endangering academic processes and for making the universities more school-like institutions (Lahtinen 1988). In the Finnish context, "school-like institution" was a catchword used by the defenders of the traditional Humboldtian university.

Towards the end of the 1970s and the beginning of the 1980s university administration was also standardized in essential ways, and a more democratic (and also a more bureaucratic) system of elected councils was introduced. In the name of uniformity, these reforms were finally carried out without considering the size, disciplines represented in or location of affected institutions. These reforms had the clear aim of bringing about, in the words of Kivinen and Rinne (1996) "a systemic convergence onto a consistent, standardized model of higher education throughout the country". Following the same rationale, all the higher education institutions were regarded as universities with professors and a right to award degrees from master's degrees to doctorates. Therefore, all art academies were also defined as universities. In the context of national higher education policy-making it was quite natural that centrally planned aims of the development Act promoted the practices of a centrally steered system (Välimaa 1994). In Finland as in many other European countries, this top-down model of reform precipitated a crisis, preparing the way for a new policy formulation. An alternative reform strategy was introduced by van Vught (1989), known as a "strategy of self-regulation". This concept was based on the assumption that institutions are innovative only as long as they have autonomy to act on their initiative. Ideologically this reiterated the policy principles underpinning liberal (or neo-liberal) thinking.

It was the Higher Education Development Act of 1986 and the government decision connected with this law that actually introduced a new development strategy based on the ideas formulated by van Vught (1989). The law and the government decision guaranteed universities their basic resources and together with a 15 per-cent annual rise in appropriations. Towards the end of the 1980s this was an exceptional trend in Western Europe, where higher education budgets were being reduced, even though the promised increase was not fulfilled to the letter. The increase of resources was, however, suddenly interrupted by a major economic recession at the turn of the 1990s. In 1991 the expansion of the higher education budget started to slow down, and in 1992 the budget was frozen at the 1991 level (see below). In 1993 budget cuts led to the repealing of the Higher Education Development Act.

The above is a description not only of economic problems, but also of a crisis of traditional welfare state policy, which had been based on steadily increasing resources. As a result, for the first time for about 30 years there was no law to regulate the development of the national higher education system. In the Finnish context this "interregnum", which lasted two years (1993–95), was something exceptional. It also meant the end of the expansion of the traditional higher education system, that is universities. The recession had also begun to change the social dynamics of the expansion. Regional policy principle has been discontinued, no new universities have been established, but a great deal of societal effort has been put into setting up high-quality polytechnics.

Thus, it seems that the crisis in traditional policy-making was related to several reforms and changes in the practises of Finnish higher education policy-making. The most important structural reform was the establishment of the higher vocational education sector. A second major change was a reform of Finnish doctoral education. Thirdly, the national steering system was developed towards practices which increase competition between and within institutions. In addition to these reforms, there have been important changes in the funding structure of Finnish universities. These issues will be discussed in the following sections.

Reforms and Changes in the 1990s

Reform of Vocational Higher Education

The major recent reform in Finnish higher education system has been the implementation of a non-university sector in the 1990s. From the perspective of governmental steering, the polytechnics (or AMK-institutions) are intended to change the overall educational structure to meet the demands of society (students and the labour market), expand and develop higher education in accordance with the requirements of international economic competition and European integration, and enhance educational provision and flexibility through more effective cooperation between institutions. In addition, students are given increased opportunities to make personal choices. It has also been assumed that the binary system will be more responsive to the needs of working life and society (see Välimaa 1994).

The Government launched this experimentation in 1991, in the midst of the economic recession, by authorising the setting up of 22 temporary vocational higher education institutions. Each of these institutions consisted of one to eight former vocational education institutions. The experimental institutions were based in all parts of Finland and represented practically all existing types of institutions and educational fields (Ahola 1993). The same structure has become the rule in the majority of new polytechnics since 1996, when the reform was was expanded into a system-wide practice. In 2001 there are 31 polytechnics located all over the country (Figure 1), most of them multidisciplinary institutions (Higher Education Policy 2000). Finnish polytechnics are normally local institutions operated by a municipality, a federation of municipalities or a registered Finnish foundation or association. All polytechnic degrees programmes are, however, approved by the Ministry of Education.

Reform of Doctoral Training

A second main problem was also awaiting for a solution. As the the higher education system expanded, the problems of a non-existent system of doctoral training became more and more evident. The main difficulties with traditional Finnish doctoral training were a lack of systematic support for doctoral studies and their funding. A substantial portion of Finnish doctoral students

have studied on a voluntarily basis outside universities (and outside their normal working hours) without any financial support. In the mass higher education system the supervision of their studies has been more or less sporadic, depending on the personal interests of their professors.

The main aim of the Finnish graduate education reform was to make doctoral training more efficient by creating a systematic structure of doctoral training that could be implemented in all disciplines. The reform was carried out on a tight schedule in 1994, with the first new graduateschools starting their operation at the beginning of 1995. On the basis of the recommendations of the Academy of Finland, the Ministry of Education granted funding for 93 graduate schools with 949 students. However, the total number of doctoral students funded through this system has been between 2 000 and 2 500, because the universities are required to fund an equal number of doctoral training post. In the context of budget cuts it was remarkable that doctoral training was defined as one of the most acute functional problems affecting Finnish higher education (Aittola & Määttä 1998).

The Academy of Finland decided that doctoral student posts should be open to all potential students and that they should be filled on the basis of applications. In practice, the posts went to researchers who were in different phases of their academic careers. Accordingly, the doctoral student population was and is academically very heterogenous. The students are expected to take their doctoral degree in four years. During their studies they are paid a monthly salary.

The number of doctorates completed in a year has more the doubled after the reform was implemented. Even though there may be no direct causal relationship between these two phenomena, it is more than evident that the establishment of graduate schools has made doctoral studies more systematic and more efficient (Aittola & Määttä 2000; see also chapter 7 in this book).

Financing Higher Education in the 1990s

In addition to reforms initiated by the Ministry of Education, there has been a gradual but rapid changes in the funding structure of Finnish higher education during last ten years. There can be seen two simultaneous trends in the 1990s. First an economic recession hit Finland hard in the beginning of 1990s, resulting in high unemployment rates (about 20% in 1993), a growing nation-

al debt and consequently, in budget cuts in the public sector. Being part of the public sector, all higher education institutions suffered from reduced budgets (Välimaa 1994). Thus, the state expenditure on higher education (universities) fell by 4.9 per cent between 1991 and 1994, after which it has grown again, reaching the level of the 1991 budget in 1998.[8] Simultaneously, however, the structure of the financing has changed.[9] The proportion of public funding of higher education by the Ministry of Education decreased by 19 per cent between 1990 and 1999 (from 84% to 65%), while external funding from both private and public sources has grown fivefold (from FIM 612 million to FIM 3 101 million). In terms of real income, between 1990 and 1999, the total income from chargeable services and other external funding (European Social Fund, The Academy of Finland, other public and private sources) increased by FIM 2 489 million, whereas funding from the Ministry of Education has grown only by FIM 1 200 million (KOTA) (see Table 3). This shift in the funding structure affects also the working conditions of the academic staff because researchers on short-term contracts are normally paid from the external funding sources. Consequently, the number of permanent academic staff

Table 3. The financing of Finnish universities (x1000 FIM mill.). Source: KOTA data base.

	1990	1995	1999
Direct budget financing	3 227 (84%)	4 547 (71%)	5 815 (65%)
Outside financing	612 (16%)	1 879 (29%)	3 101 (35%)

[8] In 1998, expenditure on the universities was FIM 5 331 million. This sum includes, however, the universities' rental costs (about FIM 1 200 million), which were added to the budget in 1995.

[9] Education, research, and culture have accounted for 13–14 per cent of the Finnish state budget in the 1990s. In real terms, the money spent yearly in the 1990s on education, research and culture has varied between FIM 25 000 and FIM 26 000 million. Higher education (20 universities, 31 polytechnics, and the Academy of Finland) was allocated a third (32.4%) of the budget of the Ministry of Education in 1997. This sum was about 4.5% of the total state budget.

(mainly professors and lecturers) has fallen from 7 800 to 7 300 people, whereas the number of other staff on external financing has almost doubled (from 5 200 to 9 600 people) between 1990 and 1999. (see Table 2)

The trend of the 1990s was a growing student-teacher ratio caused by the fact that the number of students is rising whereas the number of university teachers remains the same or has even fallen. In 1985 there were 12.7 students per teacher. In 1990 the ratio had grown to 14.2, in 1995 it was 17.9, and in 1999 there were as many as 20.9 students per a teacher in the Finnish universities (KOTA data base).

It is quite natural that the proportion of external funding (chargeable services and other sources) is highest in the universities of technology. External sources of funding have, however, become an important factor also in multidisciplinary universities. For example, at the University of Jyväskylä 40 per cent of the university budget was based on outside funding in 1999. In practice, this state of things means that even a part of the basic tasks – including the salaries of permanent staff – were covered from external funding sources.

Changes in National Steering Instruments and the New Universities Act

According to the official picture as provided by the Ministry of Education, the university administration and decision-making systems have been "streamlined by reducing the number of levels and by delegating authority" during the 1990s (Higher Education Policy 1996). The trend has been to increase the power of the academic leaders (rectors and deans and the heads of departments) at the expense of the collegial bodies. In addition, the dynamics of the Finnish higher education system have been changed with the introduction of a set of new steering instruments called "management by results" (*tulosjohtaminen*). These include budgeting by results, lump-sum budgeting, and result agreements between the Ministry of Education and theuniversities. The policy goal of management by results is to reward performance and effectiveness (Higher Education Policy 1996, 1998). The new steering instruments have prepared the ground for the new Universities Act by gradually increasing institutional autonomy both in economic and legal matters. The context for the implementation of the new Universities Act is also strongly influenced by the

"marketization" of higher education in the sense that described by Bargh, Scott and Smith (1996).[10]

In the new Universities Act (*Yliopistolaki* 1997), which came into force in August 1998, Finnish universities have been given internal autonomy in all important matters (see chapter 9 in this book). These include the right to allocate their internal resources independently of the Ministry of Education, the right to issue their own institutional decrees and establish decision-making procedures, and the right to appoint professors and other academic staff. These are significant changes in a public higher education system rooted in the traditions of the continental model because now universities have real opportunities for institutional policy-making. These changes affect also the working conditions and terms of service of the academic staff. Furthermore, it is not only symbolically important but also politically significant that universities have, for the first time in the history of Finnish higher education, the right both to appoint professors and establish or discontinue chairs and other permanent posts.

Democratic and Collegial Traditions in Decision-making

The present decision-making structures of Finnish universities are a combination of academic guild traditions, collegial practices and democratic structures. Academic *guild traditions* are represented by the idea that deans and rectors are *"primus inter pares"* normally elected from among the professors. The authority of the academic leaders is also rooted in their academic reputation in their respective disciplines. *Collegial ideas* are similarly strong in the practical lives of departments and faculties, where the ideal aim of decison-making is consensus and where senior members of academe have more influence than novices. A third ingredient are *democratic* decision-making bodies, which were introduced in the 1970s, even though the power of academic leaders (especially deans and rectors) have been increased in the 1990s. According to the Universities Act of 1997, Finnish universities are administered

[10] The term marketization has been used to describe the development of a more competitive environment within higher education. At the system level it refers to governmental policies intended to create a market-like culture and resource allocation systems, whereas at the institutional level it refers to competitive behaviour stimulated between and within institutions.

by representatives elected for a 3–5 year period. Decisionsare made by administrative bodies comprising many members representing the professors, the other teachers and researchers, the other staff, and the students. The representation of any single group must be less than half of the total membership of the given body (Higher Education Policy 1998).

At the departments, one of the senior academics (either a professor or a lecturer) is elected head of department for a fixed period of time (3–5 years). Faculties, again, are administrative units consisting of several subject departments. Faculties – and faculty councils – are led by a dean elected from among the professors. Faculties have traditionally conferred degrees and appointed the short-term academic staff. The highest decision-making body in the Finnish universities is the university senate chaired by the rector.

Evaluation in the Finnish Higher Education

Evaluation, or quality assessment, has important social functions in Finland. A belief in the usefulness of evaluation of higher education as an improvement tool has been written into the new Universities Act. Higher education institutions also use evaluation as an instrument to develop their activities. We should see, however, that the present definition of evaluation has emerged from historical experiences.[11] Namely, evaluation has arrived in Finland on three separate occasions, displaying varying emphases.

During *the "first round of evaluations"* the main aim was to evaluate the level of scientific research in Finland at the beginning of the 1980s. The decision to initiate the first round of evaluation projects was made in a political context that emphasised the importance of evaluation as a part of a national science policy aiming at more efficient public funding of research (Finnish Academy 13/1981). Inorganic chemistry was the first discipline to be evaluated (Finnish Academy 7/1983), but this evaluation was successful only in the sense of showing how evaluations should not be made: they should not be used to rank individual academics or departments in a given discipline. A

[11] Discipline-specific evaluations have been initiated by the Ministry of Education, the Academy of Finland, individual universities, or academic associations. At the beginning of the 21st century the Academy of Finland is responsible mainly for evaluating the scientific standard of disciplines.

positive aspect of this unsuccessful evaluation project was also the fact that it helped to prepare ground for an understanding that the aim of evaluation should be to encourage development instead of provoking debates on the arguments underlying the findings.

The second round of evaluations was initiated by the Ministry of Education in the early 1990s. The Ministry supported institutional evaluation projects in two Finnish pilot universities: the University of Oulu and the University of Jyväskylä. At that time it was not clear what kind of national model of evaluation would be adopted even though it was clear that evaluation should focus on the institutional level. The Ministry of Education tried to introduce an American stylish model and idea of institutional evaluation. Institutional evaluation was understood as an evaluation where the aim is to produce information for the use of university management. Following the guidelines suggested by the Ministry of Education, the University of Oulu introduced a model based on the massive gathering of information using questionnaires. The results were not convincing because there was not much commitment to the project within the academic community in the university concerned. Another problem with this approach was the fact that at that time university management (actually it should be called university central administration) had practically no instruments for institutional policy-making. The University of Jyväskylä adopted and developed another approach to evaluation. This approach was intended to involve academics in the evaluation process at the basic units. The information was not gathered for institutional purposes but instead the basic units (and the academics themselves) produced it. This process seemed to lead to a deeper commitment to developing the operations of the basic units (Välimaa, Aittola & Konttinen 1998) than the Oulu approach.

The Jyväskylä model has influenced the Finnish model of evaluation. A typical feature of all Finnish evaluation projects is a process comprising several or all of the following elements: self-evaluations are produced by the units involved; their self-evaluations are followed and supported by site visits by external evaluators; the external visitors publish an evaluation report that includes their recommendations; and the institution concerned organises a publication or development seminar where the results are discussed and to disseminated (Hämäläinen & Liuhanen 1999).

The third round of evaluation begun when the Finnish Government decided to establish the Finnish Higher Education Evaluation Council (FINHEEC) in

1995. As defined in the Decree on the Higher Education Evaluation Council (No.1320/1995), the aims of the Council are as follows:1) assisting higher education institutions and the Ministry of Education in evaluation; 2) conducting evaluation for the accreditation of the polytechnics; 3) organising evaluations of the operations and policies of higher education institutions; 4)initiating evaluations of higher education and its development; 5) engaging in international co-operation on evaluation; and 6) promoting research on the evaluation of higher education. FINHEEC is funded by the Ministry of Education, but it is not a part of the Ministry. Both in principle and in practice, it is subordinated to the Ministry of Education (like universities and the Academy of Finland), but it has internal autonomy.

Finnish Higher Education Evaluation Council consists of members appointed by the Ministry of Education for a four-year term. The members represent higher education institutions, students and various stakeholders. FINHEEC is assisted by the a Council Secretariat, similarly appointed by the Ministry of Education. FINHEEC has also made specific proposals in different evaluation projects. Universities and polytechnics have also funded their evaluations from their own budgets. The main responsibility of FINHEEC is to organised both institutional evaluations of universities and evaluations for the purpose of accrediting polytechnics.

The former Secretary of education defined that 'mutual trust' is the cornerstone of this Finnish system of evaluation (FINHEEC 2000). What does it mean? First, it means that the Ministry of Education has trust in the work done by FINHEEC. It also means that universities have trust in the expert status of FINHEEC. This stems from two things. The first factor is the independent status of FINHEEC. It is important both in principle and in practice that FINHEEC is not subordinated to the Ministry of Education even though it is funded by the Ministry of Education. Secondly, FINHEEC has a development-oriented ethos. The aim of the members of the Council and the Secretariat is to improve the functioning of higher education institutions and of the national system of education. According to its statutes, FINHEEC advises both the Ministry and higher education institutions (see Välimaa 2001a).

The Expansion of Open University

The Open University has long traditions in Finland. Historically speaking, the first courses catering for other than university students were offered as early as in the 1870s. Even though the practices have changed during the history of the Finnish Open University, the principle of offering university-level studies also to other than university students has been accepted from the very beginning. Traditionally, access to the Open University was restricted, however, to people over 25 years. This situation began to change in the early 1990s when open university studies were developed in response to rapidly increasing unemployment among the under-25 generations. The shift in policy led to a rapid expansion of open university studies and courses offered throughout the country. It has been shown that the Open University has both provided young people a testing arena and offered a new route to regular university studies and regular universities (Piesanen 1999, see chapter 8 in this book).

The Open University in Finland is run neither by a single university, nor by a separate open university institution as in the UK, but instead open university courses are offered by many Finnish universities. The organisation of these courses is the responsibility of the local educational organisations, which may be either summer universities or other public non-university institutions (Välimaa, Piesanen & Jalkanen 2001). This means not only that open university courses are based on the courses taught in regular universities courses but also that there some are differences between courses delivered by different universities. The contents vary depending on the organising institutions. For this reason, the Finnish Open University provides also an interesting perspective on the functioning of Finnish higher education because it is the form of higher education most profoundly influenced by the "market forces", that is, by students' choices between different universities. This point is all the more cogent given the fact that open university courses are paid for by the students themselves.

Massification, Nationalisation and Globalisation

New Public Management and Finnish Higher Education

In the analysis of recent changes in Finnish higher education it is useful to refer to the concept of New Public Management. According to Pollit (1995), "eight elements comprise a shopping basket for those who wish to modernise public sectors of Western industrialised societies, even though not every element is present in each country, let alone each public service" (Pollit et al. 1997 as cited in Kogan & Hanney 2000, 32). These elements are:

1) cost-cutting;
2) capping budgets and seeking greater transparency in resource allocation;
3) disaggregating traditional bureaucratic organisations into separate agencies;
4) decentralising management authority within public agencies;
5) separating the purchaser and provider functions;
6) introduction of market and quasi-market type mechanisms;
7) requiring staff to work to performance targets, indicators and output objectives; and
8) shifting basis of public employment from permanency and standard national pay and conditions towards term contracts, Performance Related Pay, and emphasis on service "quality", standard setting and "customer responsiveness".

In Finland, we have witnessed the reorganisation of the public sector in the spirit of all these elements. In higher education as a part of the public sector, a strong element has been the decentralisation of management authority. This policy principle is evident in the new Universities Act (1997) in which universities are given internal autonomy in all important matters. This also means the introduction of new steering instruments based on target negotiations between universities and the Ministry of Education. The official arguments also emphasise the fact that universities have procedural autonomy in deciding how to reach the targets (the number of academic degrees) set by the Ministry of Education. The second main trend has been the introduction of market or quasi-market type mechanisms in Finnish higher education. The

marketization of higher education has led to competition both among and within higher education institutions. The Ministry of Education also uses competition as a national steering instrument in its management by results negotiations with each university (see chapter 9 in this book). The problem is, however, that using competition as a steering instrument does not imply anything about the criteria applied. Depending on current policy objectives, the criteria may vary from year to year (see Välimaa 1999). The third major trend has been the requirement that staff work to performance targets and output objectives. This trend is closely related to the shift in the basis of public employment from permanency and standard national pay and conditions towards term contracts and performance-related pay. In universities, this has led to increasing number of "project researchers", that is, academics who have been appointed only for a certain fixed period to carry through a specific research project (see Välimaa 2001).

Meanings of Mass Higher Education?

Enrolments in Finnish universities have risen dramatically after the Second World War. The number of university students was ten times as high in the mid-1990s as it had been in the late 1940s, and the number of new students has more than quadrupled. Measured by student numbers, Finnish higher education massified during the 1970s (Trow 1974; Ahola 1993), when more than 15 per cent of the age cohort entered it. In 1999 the universities admitted 19 373 students and the polytechnics 25 804 students (KOTA). A comparison of these numbers with the size of the relevant age cohort (on an average 65 000 people aged 17–21) reveals that 69 per cent of the cohort is offered a starting place in higher education. This is one of the highest proportions in the world and requires some analytical attention. Therefore, in the concluding chapters I shall ask: how has massification changed the social role of higher education in Finland?

The main historical trend is a *democratisation* of the Finnish higher education during the 20th century. This democratisation process can be analysed with the help of three historical processes (Nevala 1999). First comes the fact that the increase in student admissions has improved the accessibility of higher education. At the same time, however, the number of formally qualified

students (that is upper secondary school leavers) has been growing even more rapidly. As a result, since the early 1970s there has been a glut of upper secondary school leavers, and their chances of being admitted to higher education institutions have diminished. According to Nevala (1999), this glut of matriculated students reflects two main changes in education in Finland, a massive rise in the level of basic education typical of the age cohort, and an inflation particularly of upper secondary school qualifications.

The second main change has been the equalisation of the language and gender distribution of students. At the beginning of the 20th century higher education was mainly the preserve of men and the Swedish-speaking minority. While this situation was beganning to alter even before Finnish independence, the changes have stabilised only after the Second World War. Women became a majority among university students as early as in the 1950s, and in later years they have strengthened their position in all academic disciplines. The only exception is the field of technology, where the proportion of female students was less than a fifth at the turn of the millennium.

The third visible change is the near disappearance, over the course of postwar period, of the disparities in the regional background of university students in Finland. This is evidently caused by the regional expansion of higher education, which has diverted the stream of students which formerly went to the dominant Helsinki metropolitan area, spreading it all over Finland. Furthermore, the differences in participation in higher education between different social groups have diminished even if not vanished. The children of the upper social classes (supervisory office personnel and entrepreneurs) are less overrepresented than before, but still they enter higher education at a rate about four times as high as that of the working class. Participation in higher education by the children of farmers and other population groups (pensioners, unemployed) corresponds to their proportion in the whole population. (Nevala 1999).

However, differences can be found between academic fields and institutions. Examined by faculty, student places in the socially esteemed elite fields (medicine, business administration, law and technology) tend to be occupied by the offspring of upper classes, whereas education receives its students from a broader range of social groups. According to Nevala (1999), the "elite university" has hidden itself inside the Finnish higher education system. Thus, from the perspective of student flow, the expansion of higher education has also meant the *differentiation* of higher education institutions (see Välimaa

1997). This way of reasoning is supported by Kivinen and Rinne (1996). According to them, at the system level the most important processes are, in spite of the official principle of the convergent homogeneity of the Finnish university system, leading in the direction of systemic diversification.

The Consequences of Massification

The increase in student numbers and the numerical expansion of higher education institutions has altered the internal social dynamics of these educational establishments. A brief description of the relevant changes must begin with the social roles of university staff.

From a student perspective, the elite system afforded a Humboldtian freedom of studying, while from a professor's perspective it meant a chair system based on the German tradition, where professors made all the important decisions, within the given university, regarding their academic fields and their departments. Together these two factors tended to produce social situations where there was a sharp hierarchy between university students and academic teachers, even though flexibility was provided by the small student-teacher ratio. There was also a tendency towards hierarchical social relations within academic departments because following the German traditions, Finnish professors were apt to consider assistants and secretaries their personal servants (see Välimaa 2001). However, the massification of universities strengthened also the other groups of university teachers; the number of lecturers and part-time university teachers (a new category that emerged during the 1970s) and of assistants and senior assistants grew rapidly between the 1960s and the 1990s. Furthermore, the expansion of universities led also to an expansion of administrative staff (secretaries, central administrative personnel), research staff (researchers and senior researchers) and the appearance of research support personnel – their most common job title is amanuensis, in Finland covering not just the simplest secretarial tasks but, rather, duties that in Anglo-Saxon universities are performed by department secretaries, research secretaries, research administrators and the like in university departments. During the economic difficulties in the 1990s the category of project researchers working under fixed-term contracts doubled in number (Välimaa 2001). Moreover, the growth of academic staff has both created pressures to reform deci-

sion-making processes within universities and changed the social dynamics of academic departments because new staff categories have been introduced and new personnel taken on. The expansion and massification of Finnish higher education was paralleled by reforms of decision-making procedures in the 1970s and the 1990s.

On the High Social Status of Higher Education in Finland

In addition to the 20 universities and 31 polytechnics there are 21 summer universities in Finland, and open university teaching is offered in almost 200 municipalities throughout the country (see Figure 1.) These impressive figures reflect the high social status that education -and especially higher education- enjoys today and has enjoyed in recent Finnish history. In this context it is only natural that all Finnish political parties share the conviction that higher education is important to the well-being of the country. Higher education institutions are seen as a part of the national innovation and development strategy helping the national economy on the world market. According to the Ministry of Education universities and polytechnics are expected to cooperate with local business and industries and by facilitating transfer of expertise to working life (Higher Education Policy 2000). The new interpretation and understanding of the universities' tasks has been formulated in the Universities Act of 1997.

It also seems that a nationalist tradition of higher education remains alive even though it has taken different forms in different periods of history. During the 19th and the 20th century universities were an important factor in the making of Finnish national identities. Today official national rhetoric sees higher education institutions as a part of the national innovation strategy. While this indicates a shift in conceptions of higher education, however, in this new sense higher education does continue to be perceived as an important aspect of the construction of the national identity (Välimaa 1996, 2001).

National Traditions of Higher Education: Nationalisation and Localisation

I have tried to show that higher education institutions have always been understood and defined in Finland as national institutions, even thought the understanding of what is "national" has changed over time. In fact, the definition of national may also be expressed as a sense of loyalty, as definitions of who academe is serving and to whom it will be loyal. When Finland was a part of the Kingdom of Sweden, the Finns were loyal to the Swedish king and also, to some extent, to the region, especially during the 18th century. The situation did not change much at the beginning of Russian rule because Finnish academics swore an oath of allegiance to the Emperor Alexander I. However, in the course of the 19th century Finns' sense of loyalty began to change, reflecting an emerging nationalism. Thus, it may be said that gradually university came to be seen as a Finnish national institution. During the 20th century universities have been understood as institutions important to the nation state.

According to Peter Scott (1995) universities have been national institutions for centuries even though academics have tended to emphasise the international elements of science and scholarship, possibly just because of this national dependence, as Scott suggests. From this perspective, the Finnish case, instead of being unique in the Western cultural sphere, is in line with developments in other countries. However, it is an interesting Finnish phenomenon that the expansion of Finnish higher education between the 1950s and the 1990s has led to the establishment of higher education institutions all over the country (see Figure 1.). This means that the expansion of higher education has led not only to the massification but also to the "provincialisation" or "localisation" of higher education. The foundation of polytechnics has been an extension of this national policy. Thus, the localisation of higher education has not only reinforced the national importance – or "nationalisation" – of higher education institutions but it has also promoted regional development in Finnish provinces. Today, higher education institutions – no matter whether they are universities or polytechnics – are defined as "'engines' of their regions'. This expression may be interpreted as indicating a new sense of loyalty directed towards regions with higher education institutions. In addition, the localisation of higher education also opens new perspectives

on the globalisation of higher education (Beck 1999; Castells 1996, 1997, 1998). When nation states are challenged by global actors, new localised higher education institutions may find it easier to discover new funding sources and partners if they have both regional and global networks (see chapter 3 in this book). The localisation of higher education may open these traditionally national institutions new avenues of development. Thus, the definition of higher education institution as a local institution may support both its national character and its global and international nature because – and depending on whether – an institution is rooted in its region.

Looking historically back to the future, it seems that the social forces which caused the expansion of Finnish universities to every region in the country have reached their zenith in the welfare state. This does not, however, mean that these social forces would vanish. It is more than probable that new combinations of academic drift, economic pressures and regional policies will continue to shape the future of Finnish higher education in a globalised world.

References

Ahola, S. 1993. Diversification and the mass higher education system in Finland. Martin Trow revisited. A paper presented at the 5th national symposium on higher education research, Jyväskylä, August 19th–20th, 1993.

Ahola, S. 1995. Eliitin yliopistosta massojen korkeakoulutukseen (From elite to mass higher education). University of Turku. Research Unit for the Sociology of Education. Report 30.

Aittola, H. & Määttä, P. 1998. Tohtoriksi tutkijakoulusta. Tutkijakoulut tieteellisten jatkoopintojen uudistajina. (Doctoral Education in Finnish graduate schools: reforming doctoral studies in Finland). University of Jyväskylä. Institute for Education Research. Research Reports 3.

Alapuro, R. 1987. De intellektuella, staten och nationen. Historisk tidskrift för Finland 72 (3), 457–479.

Alapuro, R. 1988. State and revolution in Finland. Berkeley: University of California Press.

Allardt, E. 1966. Kansakoulu yhteiskunnallisena kehitystekijänä (Elementary school as a social development agent). In A. Valtasaari, A. Henttonen, L. Järvi & V. Nurmi (eds.) Kansakoulu 1866–1966. Helsinki: Otava, 130–137.

Bargh, C., Scott, P. & Smith, D. 1996. Governing universities. Changing the culture? Bury St Edmunds: SRHE & Open University Press.

Beck, U. 1999. Mitä globalisaatio on? Virhekäsityksiä ja poliittisia vastauksia. (Was ist globalisierung? Irrtümer des Globalismus – Antworten auf Globalisierung). (What is globalisation?) Tampere: Vastapaino.

Castells, M. 1996. The information age: Economy, society and culture. Volume I: The rise of the network society. Oxford: Blackwell.

Castells, M. 1997. The information age: Economy, society and culture. Volume II: The power of identity. Oxford: Blackwell.

Castells, M. 1998. The information age: Economy, society and culture. Volume III: End of millennium. Oxford: Blackwell.

Clark, B.R. 1983. The higher education system. Berkeley: University of California Press.

FINHEC 2000. Evaluation of higher education – the first four years. Helsinki: Finnish Higher Education Evaluation Council.

Finnish Academy Publications 1981. Tieteellisen tutkimuksen arviointi (The evaluation of scientific research). Publications of the Academy of Finland, 13. Helsinki.

Finnish Academy Publications 1983. Evaluation of scientific research in Finland: Inorganic chemistry. Publications of the Academy of Finland, 7. Helsinki.

Higher Education Policy 1996, 1998, 2000. Higher Education Policy in Finland. Helsinki: Ministry of Education.

Hämäläinen, K. & Liuhanen, A-M. 1999. Preface in five years of development. Follow-up evaluation of the University of Oulu. Publications of Higher Education Evaluation Council 7:1999. Helsinki: Edita.

Isosaari, J. 1989. Seminaarista yhteiskuntaan (From seminar to society). Sortavalan seminaarista vuosina 1884–1940 valmistuneet kansakoulunopettajat maamme kulttuuri-, yhteiskunta- ja talouselämän vaikuttajina. Hämeenlinna: Suomen kouluhistoriallisen seuran julkaisuja.

Jäntere, K. 1969. Turun yliopiston perustaminen (The foundation of the university of Turku). Turun yliopisto (Ensimmäinen painos 1942).

Kallinen, M. 1995. Change and stability. Natural philosophy at the academy of Turku (1640–1713). Societas Historica Finlandiae. Studia Historica 51. Helsinki.

Kangas, L. 1992. Jyväskylän yliopistokysymys 1847–1966 (The university question 1847–1966). Tutkimus korkeakoulun perustamisesta ja kehityksestä yliopistoksi. University of Jyväskylä. Studia historica Jyväskyläensia 44.

Kivinen, O. & Rinne, R. 1996. The problem of diversification in higher education: Countertendencies between divergence and convergence in the Finnish higher education system since the 1950s. In V. Lynn Meek, L. Goedegebuure, O. Kivinen & R. Rinne (eds.) The mockers and mocked: Comparative perspectives on differentiation, convergence and diversity in higher education. Guildford: IAU Press & Pergamon, 95–116.

Klinge, M. 1987. Kuninkaallinen Turun akatemia 1640-1808 (The Royal Academy at Åbo 1640–1808). Helsinki: Otava.

Klinge, M. 1989. Keisarillinen Aleksanterin yliopisto 1808–1917 (The Imperial Alexander University 1808–1917). Helsinki: Otava.

Klinge, M. 1992. Intellectual tradition in Finland. In N. Kauppi & P. Sulkunen (eds.) Vanguards of modernity. University of Jyväskylä. Unit for Contemporary Culture 32, 33–42.

Klinge, M. 1997. Keisarin Suomi (Emperor's Finland). Helsinki: Schildts.

Klinge, M., Knapas, R., Leikola, A. & Strömberg, J. 1990. Helsingin yliopisto 1917–1990 (The University of Helsinki 1917–1990). Helsinki: Otava.

Kogan, M., Bauer, M., Bleiklie, I. & Henkel, M. 2000. Transforming higher education. A comparative study. Higher Education Policy Series 57. London & Philadelphia: Jessica Kingsley.

KOTA data base [Online]. Available: http://www.csc.fi/kota/kota.html [2 May 2001].

Kuusi, S. 1967. Miten Jyväskylän yliopisto syntyi? (The foundation of the University of Jyväskylä). University of Jyväskylä: Studia Historica Jyväskyläensia VI.

Lahtinen, I. 1988. Tutkinnonuudistus – turvavaltion interventio ylipistoon (The degree reform) Jyväskylän yliopiston ylioppilaskunta. Julkaisusarja 26.

Lehtinen, E. 1989. Suomalainen patriotismi ja kansallistunne ruotsin kaudella (Finnish patriotism and nationalism under Swedish rule). In P. Tommila, P. Pohls & M. Pohls (eds.) Herää Suomi. Jyväskylä: Gummerus.

Liesto, M. 1988. Teknillinen korkeakoulu 1908–1988 (Helsinki University of Technology 1908–1988). Hämeenlinna: Karisto.

Michelsen, K-E. 2001. Vuosisadan tilinpäätös. Helsingin Kauppakorkeakoulu 1911–2001. (The history of the Helsinki School of Economics and Business Administration 1911–2001). Helsinki: Edita.

Neave , G. 2001. The European dimension in higher education: An excursion into the modern use of historical analogues. In J. Huisman, P. Maassen & G. Neave (eds.) Higher education and the nation state. Amsterdam: IAU Press & Pergamon, 13–73.

Nevala, A. 1991. Mittavat murrokset – pienet muutokset. Korkeakoulupolitiikka ja opiskelijakunnan rakenne Suomessa 1900-luvulla. Suomen historian lisensiaattitutkielma Joensuun yliopistossa. (Unprinted licensiate thesis: higher education policy and the structure of student population in Finland in the 20th century).

Nevala, A. 1999. Korkeakoulutuksen kasvu, lohkoutuminen ja eriarvoisuus Suomessa (Growth, fragmentation and inequality in higher education in Finland). Suomen Historiallinen Seura. Bibliotheca Historica 43. Helsinki.

Nordström, W.E. 1968. Academica Aboensis Rediviva 1918–1968. Ekenäs: Ekenäs tryckeri.

Nuorteva, J. 1999. Suomalaisten ulkomainen opinkäynti ennen Turun akatemian perustamista 1640 (Finnish study abroad before the foundation of the Royal Academy of Turku (Academia Aboensis) in 1640). Societas Historica Finlandiae. Helsinki: Hakapaino.

Nurmi, V. 1995. Suomen kansakoulunopettajaseminaarien historia (The History of teacher training seminars in Finland). Helsinki: OAJ.

Perälä, T. 1970. Turun yliopisto 1920–1939 (The University of Turku 1920–1939). Turku.

Perälä, T. 1975. Turun kauppakorkeakoulu 1950–1975 (Turku School of Economics and Business Administration 1950–1975). Turku.

Perälä, T. 1977. Turun yliopisto 1939–74 (The University of Turku 1939–74). Turku.

Piesanen, E. 1999. Avoin yliopisto yksilöllistyvän yhteiskunnan markkinoilla (The open university on the markets of an increasingly individual society). Koulutus- ja työmarkkinapolitiikan 'pelinappula' vai nuoren aikuisen mahdollisuus? . University of Jyväskylä. Institute for Education Research. Research Reports 8.

Pollit, C. 1995. Justification by works or by faith? Evaluating the New Public Management. Evaluation 1 (2), 133–154.

Rassi, R. 1974. Kasvatusopillisesta korkeakoulusta pienoisyliopistoksi (From teacher training college to a small university). Jyväskylän kasvatusopillisen korkeakoulun kehitys v. 1934–1958. Jyväskylän yliopisto. Suomen historian julkaisuja 2.

Rommi, P. & Pohls, M. 1989. Poliittisen fennomanian synty ja nousu (The emergence of the political Fennomania). In P. Tommila, P. Pohls & M. Pohls (eds.) Herää Suomi. Jyväskylä: Gummerus.

Saarsalmi, M. 1961. Kauppakorkeakoulu 1911–1961 (Helsinki School of Economics and Business Administration 1911–1961). Helsinki.

Sandström, H. 1974. Handelshögskolan vid Åbo Akademi 1927–1977. Handelshögskolan vid Åbo Akademi, serie A, 18.

Scott, P. 1998. The globalization of higher education. Bury St Edmunds: SRHE & Open University Press.

Strömberg, J. 1987. Ylioppilaat sekä laajeneva ylioppilaskunta (Students and the expanding student population). In M. Klinge et al. , Kuninkaallinen Turun akatemia 1640–1808 (The Royal Academy at Åbo 1640–1808). Helsinki: Otava.

Strömberg, J. 1989. Ylioppilaat (Students). In M. Klinge, R. Knapas, A. Leikola & J. Strömberg. 1989. Keisarillinen Aleksanterin yliopisto 1808–1917. (The Imperial Alexander University 1808–1917). Helsinki: Otava.

Thaden, E.C. 1984. Russia's western borderlands, 1710–1870. With the collaboration of Marianna Foster Thaden. Princeton (N.J): Princeton University Press.

Trow, M. 1974. Problems in the transition from elite to mass higher education. Policies for higher education. Conference on Future Structures of Post-Secondary Education. Paris.

Universities Act 1997. (Yliopistolaki. L 645/1997).

Van Vught, F.A. 1989. Creating innovations in higher education. European Journal of Education 24 (1), 249–270.

Virtanen, M. 2001. Fennomanian perilliset. Poliittiset traditiot ja sukupolvien dynamiikka. (The heirs of Fennomans. Political traditions and the dynamics of generations). Hämeenlinna: SKS 831.

Välimaa, J. 1994. A trying game: experiments and reforms in Finnish higher education. European Journal of Education 29 (2), 149–163.

Välimaa, J. 1996. Private and public intellectuals in Finland. In W.G.Tierney & K. Kempner (eds.) The social role of higher education. Comparative perspectives. New York: Garland, 185–207.

Välimaa, J. 1997. Korkeakoulutus kolmiossa. Näkökulmia Korkeakoululaitoksen muutoksiin. (Higher education in a triangle. Perspectives into the changes in Finnish higher education). Jyväskylä: Institute for Educational Research.

Välimaa, J. 1999. Managing a diverse system of higher education. In M. Henkel & B. Little (eds.) Changing relationship between higher education and the state. London & Philadelphia: Jessica Kingsley, 23–41.

Välimaa, J. 2001a. Evaluation in Finnish Higher Education. In M. Mollis (ed.) Evaluación y Acveditación dos perspectivas comparadas. Forthcoming.

Välimaa, J. 2001. The changing nature of academic employment in Finnish higher education. In J. Enders (ed.) Academic staff in Europe: changing contexts and conditions. Westport (Conn.): Greenwood, 67–90.

Välimaa, J., Aittola, T. & Konttinen, R. 1998. Impacts of quality assessment: The case of Jyväskylä University. Higher Education Management 10 (2), 7–29.

Välimaa, J., Piesanen, E. & Jalkanen, H. 2001. Kesäyliopistojen ulkoinen arviointi (External self-evaluation in Finnish summer universities). Forthcoming.

Westerlund, G. 1984. Svenska Handelshögskolan. Återblick på en 75-årig utveckling. Helsingfors.

Wuolle, B. 1949. Suomen teknillinen korkeakouluopetus 1848-1948 (Technical higher education in Finland 1848–1948). Helsinki: Otava.

Ylikangas, H. 1998. Suomi itäisen suurvallan varjossa (Finland in the shade of the Eastern Empire). In J. Salovuori (ed.) ...vaikka voissa paistais? Venäjän rooli Suomessa (The Role of Russia in Finland). Osmo Jussilan juhlakirja. Porvoo: WSOY.

Chapter 3

JUSSI VÄLIMAA

Analysing Massification and Globalisation

Introduction

The main objective of this article is to analyse the concepts 'the massification of higher education' and 'globalisation' as intellectual devices for analysing social phenomena in the field of tertiary education. As a term, massification began its triumphal march in higher education studies in the 1970s, whereas globalisation was introduced only recently. Both concepts, however, seem to be widely applied but rarely analysed as terms of higher education research. In the following sections they will be examined using the method of the conceptual triangle, where each concept is broken down into three dimensions. First, each is basically a word, at the same time as it also refers to certain things (or entities, or phenomena) which it is supposed to explain or describe. Thirdly, the concept may have various connotations (it has intension) (see Kakkuri-Knuuttila 1999; see figures 1 and 2).

On the Meanings of Massification

Traditionally, massification has been defined in terms of the volume of student enrollment in national higher education systems. Following this traditional definition, a national higher education system enters the phase of massification when a certain proportion (normally 15%) of the age cohort is admitted to higher education (Trow 1974). This sociological definition is in-

tended to describe changes in the social role of higher education in a society when the expansion of higher education reaches a certain level.

However, there are other ways to use and apply the concept of massification and interpret the growth of student numbers in Finnish universities and polytechnics than the sociological ones. There is reason to analyse the many meanings of the concept more precisely. The conceptual triangle will be employed to consider massification first as a word, then as a means of referring to certain things (social phenomena), and finally I shall also reflect on its various connotations and interpretations.

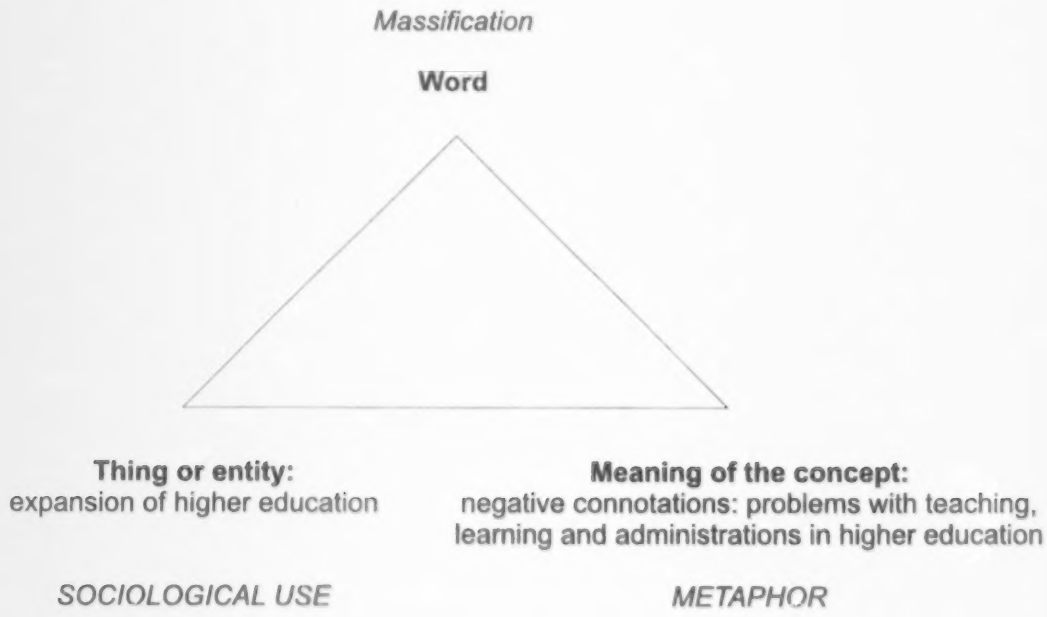


Figure 1. The Meanings of massification as a word, concept and thing (or entity).

Word

The word massification has been translated literally into Finnish *(massoittuminen)*. In Finland, it has been used in the literature of higher education research as a word to describe both the expansion of the national higher education system and the increase in student numbers in Finnish universities as

opposed to the previous elite system of only a small number of universities with limited numbers of students. In English, if we are to believe the dictionaries the word massification does not exist; however that may be, it has been derived from the word mass. According to the *Oxford Advanced Learner's Dictionary* (5th ed. 1995), mass is "an often large quantity of something without a definite shape; or a large number of people or things together". Therefore, in both languages massification is a new word and a new concept used in a specific sense in the research literature on higher education.

Thing or Entity

As a sociological concept, mass higher education – or massification of higher education – describes the expansion of higher education systems and the move away from an elite system of higher education towards a higher education system catering for a large proportion of the population. In fact, in a more precise sense the concept refers to the expansion of a national tertiary education system. Originally it described the shift in the social dynamics of highereducation during the historical development from an elite to a mass and eventually to a universal system of tertiary education.

However, the sociological concept seems to have become associated with various interpretations during its last 30 years of use in higher education studies. It is, thus, helpful to take a look at current ways of understanding massification. According to Peter Scott (1995), a mass higher education system can be defined "under four main headings" (1995, 113–115). First comes the relationship between mass higher education systems on the one hand and society and the economy on the other. Briefly, the growth in student numbers and in the number of higher education institutions have transformed the social role of these educational institutions. The elite universities used to be exclusive while the new mass higher education institutions are inclusive in their selection of students. This dimension of massification is linked with that of the labour market. The elite institutions used to reproduce the social elite, whereas the new mass higher education institutions prepare professionals for various positions – both permanent and temporary – on the labour market.

A second main feature is the distinctive shape and structure of mass higher education systems. Alongside the existing dominant institutions – the universities – there emerges new types of institutions. The most typical examples are

higher vocational education institutions, in Finland, called either polytechnics or AMK institutions. The important point is, however, that a mass higher education system represents a pluralistic, diversified and systemically complex type of tertiary education provision.

Scott's third heading covers a shift in the missions of the relevant institutions. Not only do universities have multiple missions but they also face a need to reorganise and improve their internal management and administration. In order to survive and flourish in the new more competitive higher education marketplace universities must develop strategic plans that are not only reactive but also proactive.

Scott's fourth heading in his "definition of mass higher education concerns the process itself." This is a reference to a more heterogeneous student body and its consequences for curricula, the relationship between students and teachers, and credit systems and quality systems in higher education institutions. In addition, the diversification and expansion of the student population also opens new opportunities for the establishment of international qualifications and standards and for cooperation between tertiary education institutions.

An analysis of the entity to which the word massification refers shows that in the sociological context the concepts of mass higher education and massification have been used to describe changes in the social role of higher education. What is important here is that in this frame of analysis, higher education is seen as a part of society; moreover, higher education is also defined in terms of societal reproduction. The concept of massification also focuses attention on changes within higher education institutions taking place as enrolments keep growing and organisational complexity continues to increase. In this sense the concept describes the diversification of institutions and of the structure of the student population.

Meanings

The meanings of a concept are the various uses that it may have in everyday language. In the Finnish academic world the concept of massification seems to have been introduced as an explanation for and cause of all kinds of negative developments within the universities. One can hear the 'm-word' mentioned many times when one discusses the (assumedly low) level of university

66

teaching or when one launches a project to improve teaching in universities. In fact, many of the improvements and innovations in university teaching seem to have emerged as reactions to problems created by the massification of higher education (see Honkimäki in this book). Therefore, in the context of Finnish academic teaching massification seems to be identical with bad teaching or problems with teaching. On the basis of Finnish experience it appears that massification has been used as a metaphor to describe – and often also to explain – the problems of poor teaching caused by or related to the increase in student numbers. It also seems that this metaphorical application of the concept is rather common among Finnish academics. Furthermore, as a social phenomenon and as a metaphor massification appears to be defined in terms of its contradictory relationship with individual thinking and autonomy. Massification represents here a stress factor affecting academics that symbolises problems encountered in the organisation of their work (see Kallio in this book).

Summing up the analysis, massification may be defined as a sociological concept when we employ it to examine changes in the relationship between higher education and society, whereas in everyday language it is used metaphorically as a reference to all sorts of problems that academics come up against as they organise their work.

The Finnish meaning of massification presented above suggests that any understanding of the concept is bound up with its national contexts. What I mean is that from an international perspective, one could ask whether the Finnish higher education system is massified in the first place. As compared to many European (such as Italian (Moscati 2001) or Spanish (Mora 2001) or Latin American (such as Argentine (Mollis 2001)) higher education for example, Finnish universities and polytechnics are rather small institutions with manageable and convenient student-teacher ratios.[1] But this is not how the situation is perceived in Finland. Accordingly, the Finnish use of the word massification also suggests that as a metaphor massification is a relational con-

[1] In 1999, multidisciplinary universities had an average enrolment of 7 596 students (varying from 3 300 to 36 000 students) while the student-teacher ratio was 20.9. In Finnish polytechnics, enrolments averaged 3 113 students in permanent institutions, ranging between 1 194 and 5 496 students per individual institution (see the KOTA and AMKOTA data bases).

cept: it describes local change and change in the work of academic teachers rather than change in the functioning of a national higher education system.

On the Dimensions of Globalisation

The concept of massification both describes and provides intellectual devices for analysing changes in national higher education systems. These systems are, however, facing new challenges in Europe at the beginning of the new millennium. A popular catchword, globalisation, is used with the aim of describing these changes. However, the meaning that globalisation has in the context of higher education seems to be at least as complex, in conceptual terms, as that of massification. In what follows I shall first apply the conceptual triangle to structure my analysis.

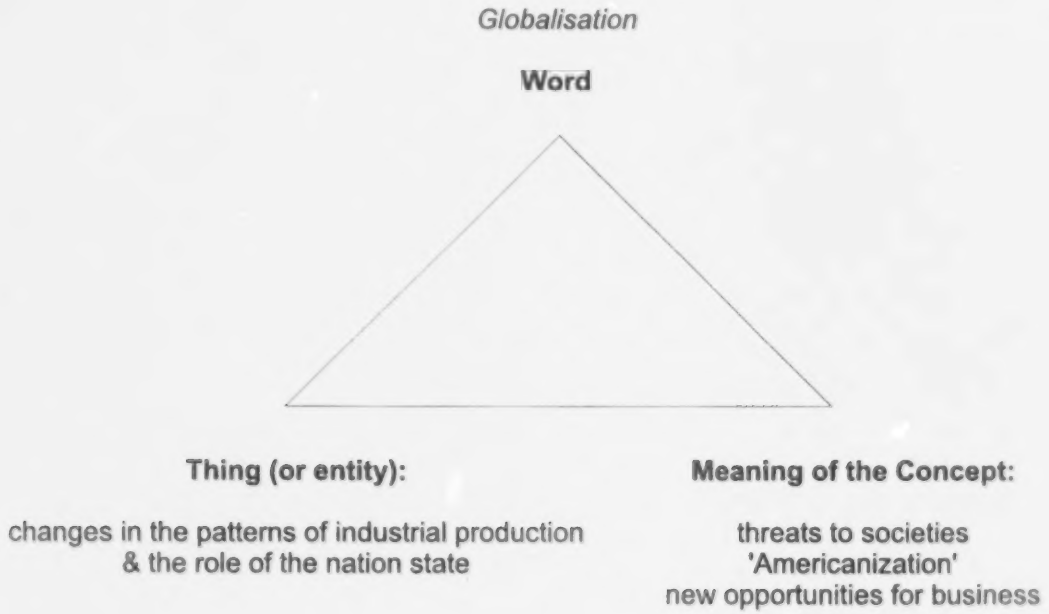


Figure 2. The Meaning of globalisation as a word, thing and concept.

Word

The *Oxford Advanced Learner's Dictionary* (1995) does not recognise 'globalisation' (in Finnish, *globalisaatio*). However, the word global means something which is "covering or affecting the whole world".

On the Meanings of the Concept

It is not easy, perhaps not even possible, to analyse the meanings of a concept whose use is expanding in societies. What can be said for certain is that there are a range of different meanings and connotations expressed by this concept. To illustrate the variety of ways in which globalisation is understood one needs only to point to demonstrations against globalisation around the meetings of world leaders discussing world trade. To argument negatively, one could say that it would be hard to employ the word globalisation without making any reference to its economic aspect, to globalisation as the organisation of global markets. It seems also probable that globalisation tends to be linked with the dominant role of the United States. In this context, globalisation easily becomes identified with "Americanization" through the diffusion of American business, technology, language and culture.[2]

Thing or Entity

The problems continue when we try to use the word globalisation systematically to analyse a social phenomenon which is "covering or affecting the whole world". There are two interrelated issues here. First, we should be able to define what recent changes in patterns of industrial production and in societies are global. Secondly, we should be able to define what these changes are and how they affect the world as a whole. The difficulty is not only that there are different ways of understanding the nature of the relevant social changes and trends but also that there are different ways of defining, understanding

[2] These aspects of globalisation were articulated in a seminar on The University in the Era of Globalization held at the University of Virginia on 13 November 2001.

and using the content of the concept of globalisation. As a concept globalisation has been brought into play in a great variety of books and articles.[3]

For these reasons, I shall begin the analysis by mapping some of the most recent interpretations of globalisation as a social phenomenon. David Held and his colleagues (1999) are helpful in this clarification of different schools of globalisation. Having concluded my clarificatory mapping I shall then continue my pursuit of an understanding of the nature of globalisation as a mode of societal development by drawing on the magisterial synthesis of Manuel Castells (1996, 1997, 1998).

Global Discourses and Transformations

David Held and others (Held et al. 1999) have opened seminal perspectives on the debates around globalisation in their volume *Global Transformations*. In the introductory chapter the authors distinguish between three different schools of thought regarding globalisation, termed by them **hyperglobalisers, sceptics** and **transformationalists**. Each of these schools represents a "distinctive account of globalisation" or an attempt to understand the social phenomenon of globalisation. Among the authors' aims is demonstrating that globalisation is contested both as a concept and as a social phenomenon. They maintain that "for the hyperglobalizers contemporary globalization defines a new era in which peoples everywhere are increasingly subject to the disciplines of the global marketplace." The opposite perspective is presented by the sceptics, who maintain that globalisation is essentially a myth, a myth which conceals the reality of an international economy increasingly segmented into three major regional blocs within which national governments remain very powerful. As for the transformationalists, they see the contemporary globalisations as historically unprecedented. According to them, states and societies across the globe are "experiencing a process of profound change as they try to adapt to a more interconnected but highly uncertain world".

The main difference between these three interpretations of globalisation is their perception of the role of the nation state. The **hyperglobalisers** "share

[3] Ulrich Beck's discussion (1999) of globalisation (first printed in 1997) contains more than 40 references to books on the subject.

the conviction that economic globalization is constructing new forms of social organization that are supplanting, or that will eventually supplant, traditional nation-states as the primary economic and political units of world society", as Held and his collaborators put it. This *hyperglobalisation thesis* also maintains that globalisation is primarily an economic phenomenon. Grounding themselves both on assumptions derived from Marxist ideology and on neo-liberal convictions (this is possible because globalisation theses are not ideologically monolithic constructions but consist of different perspectives and convictions), hyperglobalisers predict that globalisation will lead to growing polarisation between winners and losers in the global economy, even though this is not inevitable. Another essential aspect of their argumentation is the notion that this "global civilization", which has its own mechanisms of global governance (whether it be the IMF or the disciplines of the world market), will create a situation in which states and peoples are increasingly the subjects of new public and private or regional authorities. Finally, globalisation will lead to a radically new world order where the power of the nation states will wane. The authority of the nation state is challenged because "national governments become increasingly unable to control the global economic flows and to fulfill the demands of their own citizens", as Held and others sum up their views. As a result, the institutions of global and regional governance take on a bigger role while the sovereignty and autonomy of the state erode further. This may foreshadow an emerging global civil society. In short, the hyperglobalisers are saying that economic power and political power are becoming more effectively denationalised and diffused. In this way the they predict a fundamental reconfiguration of the framework of human action (Held et al. 1999).

The sceptical thesis, again, maintains that instead of globalisation we should be speaking about *internationalisation*, the implication being that global interactions are taking place predominantly between national economies. Basing their views on the statistical evidence of world flows of trade investment and labour since the nineteenth century, the sceptics reason that globalisation is a myth. In fact, they assert that globalisation was a far more important phenomenon during the late 19th century than it is now. The sceptics' argumentation, like that of the hyperglobalisers, is, however, predominantly economic. They rely on an economist's conception of globalisation, "equating it primarily with a perfectly integrated global market." However, as Held and his colleagues (1999, 5) note, what the sceptics have in mind is an ideal type of

economic globalisation; when they compare their ideal type with reality they see no significant globalisation taking place. Furthermore, the sceptics argue that internationalisation is very much dependent on the regulatory power of national governments to ensure continuing economic liberalisation. On these grounds, the sceptics wish to criticise what they see as the 'popular myth' that the power of national governments or state sovereignty is being undermined by economic internationalisation or global governance.

For most sceptics, the current evidence shows that a significant *regionalisation* is taking place and that the world economy is evolving in the direction of three major financial and trading blocs, Europe, Asia-Pacific and North America. The sceptics also see globalisation and regionalisation as contradictory tendencies. It is therefore quite natural that they should predict that in the future we will see the world fragmenting into civilisational blocs and cultural and ethnic enclaves, as has been suggested by Samuel Huntington (Huntington 1996). Those considering the situation from sceptical perspectives also maintain that globalisation and economic internationalisation are primarily Western projects and that their main objective is to sustain the primacy of the West in world affairs.

The authors of *Global Transformations* seem to consider **the transformationalist thesis** the most fruitful one of the three. They define the transfomationalists as representing a point of view whose aim is to understand globalisation as a process which is historically unprecedented. As the authors see it, "at the dawn of a new millennium, globalization is a central driving force behind the rapid social, political, and economic changes that are shaping modern societies and world order." According to the transformationalists, "contemporary processes are historically unprecedented such that governments and societies across the globe are having to adjust to a world in which there is no longer a clear distinction between international and domestic, external and internal affairs" (Held et al. 1999, 7) The authors argue further that among the transformationalists "globalization is conceived as a powerful transformative force which is responsible for 'a massive shake-out' of societies, economies, institutions of governance and new world order (Giddens 1996 in Held et al. 1999, 7). However, the direction of the developments triggered by this 'shake-out' remains uncertain. The transformationalists see globalisation as a long-term historical process shaped by contextual factors. They believe that contemporary globalisation is reconstituting the power, functions and author-

ity of national governments. In the words of Held and his co-authors, the nation state as a self-governing autonomous unit appears to be a more normative claim than a descriptive statement". Accordingly, nation states are no longer the sole centres or the principal formats of governance or authority in the world because authority has become increasingly diffused among public and private agencies at the local, national, regional and global levels (Held et al. 1999). The transformationalists also say that governments seek various strategies to adapt to the new environment. These may be described as consisting of three models: the *neoliberal minimal state*, the *developmental state* (where the government is the central promoter of economic expansion), and the *catalytic state*, in which the government's aim is to be a facilitator of coordinated and collective action (Held et al. 1999, 9).

After having thus outlined the globalisation debates Held and his colleagues place themselves in the camp of the transformationalists. Their purpose is to show that in a historical analysis, today's globalisation differs from the previous globalisations. They stress the concept of global interconnectedness. The authors are interested in the widening, deepening, and speeding up of this global interconnectedness. They examine the phenomenon by making a distinction between two dimensions. First they define the relevant spatio-temporal dimension as follows:

> globalization can be thought of as a process (or a set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity, and impact – generating transcontinental or interregional flows and networks of activity, interaction and the exercise of power.(1999, 16)

In this context, the word 'flows' refer to movements of physical artefacts, people, symbols, tokens and information across space and time. 'Networks' denotes regularised or patterned interactions between independent agents, nodes of activity, or sites of power. The authors argue that this definition helps to distinguish between globalisation and processes which are spatially far more limited. These "spatially more limited processes" are defined as *localisation, nationalisation, regionalisation and internationalisation*. It should be noted here that Held and others use the term regional to refer to regions like EU. Globalisation is, however, not contradictory to such spatially limited processes. Instead, they relate to each other in a complex and dynamic way. One might

even say that localisation, nationalisation, regionalisation and internationalisation are dimensions of globalisation.

As a summary, it may be said that the problem addressed in *Global Transformations* is how globalisation should be analysed on lower than national or nation-state levels. It seems also that Held and his colleagues are writing the history of the world from a global perspective. They are vitally interested in the history of forms of cooperation and of cooperation institutions and networks, especially when they analyse the history of Premodern Globalisation (-> 1500) and Early Modern globalisations (1500–1850). The perspective is new and interesting. However, a critical reader might ask whether this is really a history of globalisation, or, rather, a history of mankind from the perspective of mutual interconnectedness, integration and cooperation.

Held and his co-authors are, however, convincing and most helpful in their analysis of thedifferent schools of thought on globalisation. It is clear that globalisation is a contentious issue both as a concept and as a social phenomenon. What makes these various approaches to globalisation problematic is that the social phenomenon -the changes in industrial production patterns and the development of societies- is easily lost in the academic debates on the meaning of the concept. This is, perhaps, one of the reasons why Manuel Castells is not interested in writing about books but about the world. According to Cloete (2001), Castells belongs to the tradition of classical political economists in which the focus of the analysis lies on delineating changes taking place in the mode of development, a context broader than the mode of production.

On the Social Phenomena: A Network Society in the Age of Information

Following sociological traditions -and especially Marxist interpretations of the dynamics of societal development- Manuel Castells has set himself the goal of proposing "some elements of an exploratory, cross-cultural theory of the economy and society in the information age, as it specifically refers to the emergence of a new social structure" (Castells 1996, 26–27). Castells studies "the emergence of the new social structure, manifested under various forms depending on the diversity of cultures and institutions throughout the planet" (Castells 1996, 14). According to him, "the theoretical perspective underly-

ing this approach postulates that societies are organized around human processes structured by historically determined relationships of **production, experience** and **power**" (Castells 1996, 14–15).

Production is "the action of humankind on matter (nature) to appropriate it and transform it for its benefits by obtaining a product, consuming (unevenly) part of it, and accumulating surplus for investment." According to Castells "production is a socially complex process, because each of its elements is internally differentiated". Furthermore, "the relationship between labor and matter in the process of work involves the use of means of production to act upon matter on the basis of energy, knowledge, and information. Technology is the specific form of this relationship". In the era of globalisation the dynamics of production are changed because knowledge upon knowledge itself is the main source of productivity. The important point here is also that production is organised around class relationships. (Castells 1996, 15–18).

Experience is defined as an endless search for fullfillment of human needs and desires. According to Castells, this search is an action determined by the interaction between human beings' biological and cultural identities, and in relationship to their social and natural environment. Experience, again, is structured around gender/sexual relationships. (Castells 1996, 15)

Power is a human relationship which makes possible the building of social institutions and the use of violence, whether actual or symbolic. Castells writes that power is "that relationship between human subjects which, on the basis of production and experience, imposes the will of some subjects upon others by the potential or actual use of violence, physical or symbolic." Power is founded upon the state and its institutionalised monopoly of violence.

The essential starting point of Castell's books is the argument that "our societies are increasingly structured around a bipolar opposition between the Net and the Self" (Castells 1996, 3). When this basic assumption is analysed within the framework of human processes (which are shaped by production, experience and power), we may understand why Castells is interested in the new modes of production, the importance of identity and the role of nation states in the information age. To put it simply: production exerts a strong influence on the structures of societies, experience is rooted in identities, and the role of the nation state is challenged by new global actors which are reshaping the relations between local and national agents.

The interesting concept in Castells' books is not necessarily globalisation, because he does not structure his discussion around this particular theme, but information. In fact, why does the author define the new millennium as the Information Age?

The answer to this question can be found in the historically new situation. According to Castells, the question should be approached from the perspective of "traditional sociological tradition according to which social action at the most fundamental level can be understood as the changing pattern of relationship between Nature and Culture" (Castells 1996, 477). From this viewpoint, originally this relationship was based on the domination of Nature over Culture. The second phase of the Culture-Nature relationships was reached at the beginning of the Modern Age, associated with the Industrial Revolution and with the rule of Reason. The Modern Age saw the domination of Nature by Culture. According to Castells, we are just now entering a new stage in which Culture refers to Culture. This means, roughly, that humankind has superseded Nature to the point that Nature is artificially revived as a cultural form. In this new developmental phase mankind has reached a purely cultural pattern of social interaction and social organisation. Therefore, "this is why information is the key ingredient of our social organization and why flows of messages and images between networks constitute the basic threat of our social structure" (Castells 1996, 477).

In this sense, the network society does indeed represent a qualitative change in human experience. But what is a network society? Castells says that "a network is a set of interconnected nodes. A node is the point at which a curve intersects itself." (Castells 1996, 470.) There are various kinds of node, their character depending on the concrete networks where they exist. Castells gives the following examples: stock exchange markets and their ancillary advanced services centres; national councils of ministers and the European Commissioners; television systems, entertainment studios, computer graphics milieux, news teams, and mobile devices generating, transmitting, and receiving signals across the global network of the new media. These examples reveal that 'network' and 'node' are very flexible intellectual devices. But how do they function? According to Castells, the distance (or intensity of interaction) between two points (or social positions) is shorter (or more frequent, or more intense) if both points are nodes in a single network than if they belong to differentnetworks. Castells also asserts that inclusion or exclusion in networks

configures the dominant processes and functions in our societies.

Networks are also open structures, capable of infinite expansion and of integrating any number of new nodes as long as these are able to communicate within the network. However, the necessary precondition for a network is that its communication codes (such as values or performance goals) are the same in all parts of the network.

Therefore, a network-based social structure is a very dynamic, open system, able to innovate without endangering its own balance. For these reasons, networks are appropriate instruments both for a capitalist economy based on innovation, globalisation and decentralised concentration and for a post-modern culture constantly coding and decoding its symbols and messages.

In addition to network and node, Castells presents a third important concept, that of 'switch'. For Castells, "switches connecting networks (for example financial flows taking control of media empires that influence political processes) are the privileged instruments of power" (Castells 1996, 471). Accordingly, "interoperating codes and switches between networks become the fundamental sources in shaping, guiding and misguiding societies" (Castells 1996, 471). Castells emphasises the power of switches also because social evolution and information technologies have created a material basis for their functioning throughout the social structure. As a result, the material basis, which is built of networks, shapes the social structure itself.

It is also useful to remember what a German sociologist, Ulrich Beck (1999), has said about globalisation. According to him, the essential aspects of today's new globalisation include the fact that the world and the nation states no longer have a single centre of power but instead there are many centres and spheres of power interacting with each other. Given this, the social conditions created by "*die andere Moderne*", as Beck calls it, are drastically different from those generated by the traditional industrial societies based on social classes.

What about the role of the nation state in this new social structure made up from networks of production, power and experience? A general answer seems to be that the role of nation states is changing because they can no longer control the international flows of capital. At the same time, however, states may become the premier agents of globalisation if and when they facilitate capital flows.

For two main reasons, the role of higher education in this new social situation may be defined as essential. First, higher education trains the knowledge-

able labour force (self-programmable labour), the people who are able to make the new information technology productive. High-quality education is the process which creates the distinction between generic labour and self-programmable labour (see Cloete 2001). The second main factor is the role of scientific research in the development of modern information technologies. Higher education institutions have traditionally been at the core of the creation of new knowledge. Increasingly, the challenge facing the globalised era seems to lie in the problem of how to shorten the innovation chain between research units and business enterprises. It remains to be seen whether this means that "knowledge formation and power over knowledge in the global economy is moving out of the control of the nation-state" and, furthermore, that "the nation-state is also losing control over the educational system", as Carnoy (2001) has it. It seems evident, however, that the dynamics of national higher education systems are being put to the test. In this context, globalisation seems to be an intellectual device which opens fruitful future avenues of questioning traditional ways of reasoning about national higher education systems.

Combining Massification and Globalisation as Intellectual Devices

Above I have discussed the meanings of massification and globalisation. On the basis of the analysis it seems evident that both concepts are helpful in focusing attention on changes in the social dynamics of higher education as a part of society. The concept of massification brings with it the realisation that the social dynamics of national education (and reproduction) systems change when there are more students, more academic teachers and more institutions. This intellectual device also makes it easier to remember that the nation state has come to play a crucial role in this field because it is the main funding source of national mass higher education systems. However, it is possible that the definition of massification pays what may be too much attention to the internal social dynamics of the nation state. This is problematic because the role of international, regional and global actors (in Finland especially that of the European Union) is growing. Global educational markets are also creating new dynamics which have the potential to challenge traditional

national higher education systems. Therefore, it seems that massification is constantly needed as a perspective on the functioning of national higher education systems, but we require also wider perspectives. Considered as an intellectual device, globalisation seems to provide these new perspectives despite being contested both as a concept and as a social phenomenon. The important point, however, is that globalisation focuses attention on changes in the relationship between global actors on the one hand and nation states and higher education institutions on the other. The concept foregrounds changes in the social dynamics of higher education and knowledge production, which has become a production factor within the nation state. It also reminds us that competition on educational markets has ceased to be a matter that can be decided by nation states, becoming an issue where global actors are unavoidably involved.

References

Beck, U. 1999. Mitä globalisaatio on? Virhekäsityksiä ja poliittisia vastauksia (Was ist globalisierung? Irrtümer des Globalismus – Antworten auf Globalisierung) (Tapani Hietaniemi, trans.). Tampere: Vastapaino.

Castells, M. 1996. The information age: Economy, society and culture. Volume I: The rise ofthe network society. Oxford: Blackwell.

Castells, M. 1997. The information age: Economy, society and culture. Volume II: The power of identity. Oxford: Blackwell.

Castells, M. 1998. The information age: Economy, society and culture. Volume III: End of millennium. Oxford: Blackwell.

Carnoy, M. 2001. The role of the state in the new global economy. In J. Mueller, N. Cloete & S. Badat (eds.) Challenges of globalisation -South African debates with Manuel Castells. Cape Town: Makew Miller Longman, 22–59.

Cloete, N. 2001. Introduction: Plugging in. In J. Mueller, N. Cloete & S. Badat (eds.) Challenges of globalisation -South African debates with Manuel Castells. Cape Town: Makew Miller Longman.

Giddens, A. 1996. Sociology. Cambridge: Polity Press.

Held, D., McGrew, A., Goldblatt, D. & Perraton, J. 1999. Global transformations. Politics, economics and culture. Stanford: Stanford University Press.

Huntington, S. 1998. The clash of civilizations and the remaking of world order. London: Touchstone.

Kakkuri-Knuuttila, M.-L. (ed.) 1998. Argumentti ja kritiikki. Lukemisen, keskustelun ja vakuuttamisen taidot (Argumentation and criticism. Reading, discussion and persuasion skills). Helsinki: Gaudeamus.

KOTA database.
Mollis, M. 2001. La universidad argentina en transitó. Ensayo para jóvenes y no tan jóvenes. Buenos Aires: Fondo de Cultura Económica.
Mora, J-G. 2001. Adapting to change: the academic profession in Spain. In J. Enders (ed.) Academic staff in Europe. Changing contexts and conditions. Westport & London: Greenwood, 255–267.
Moscati, R. 2001. A Guild in transition: the Italian case. In J. Enders (ed.) Academic staff in Europe. Changing contexts and conditions. Westport & London: Greenwood, 173–194.
Scott, P. 1995. The meanings of mass higher education. Bury St Edmunds: SRHE & Open University Press.
Trow, M. 1974. Problems in the transition from elite to mass higher education. Policies for higher education. Conference on future structures of post-secondary education. Paris.

Chapter 4

EEVA KALLIO

Reflections on the Modern Mass University and the Question of the Autonomy of Thinking

Introduction

The article examines the concepts of 'massification' and 'globalisation' of higher education and contrasts them with some concepts from developmental psychology. The traditional task of universities is to train autonomous, self-directed and critical citizens who think scientifically. In this article I shall ask whether these tasks are possible in 'massified', 'marketised' and 'globalised' universities. My main aim is to draw on empirical findings to open theoretical perspectives on the topic.

Current discussion about adult cognitive development is taken into consideration here because instructing students in scientific thinking skills is among the foci of research in this field. Developmental psychology produces basic psychological knowledge about the specific periods of life that university students and university staff are going through. The modern conception of how thinking develops in adulthood, known as the 'post-Piagetian' tradition, will be used as an instrument for considering how primarily sociological concepts (massification, globalisation) can be analysed by means of psychological theories.

Eeva Kallio

Developmental Psychological Aspects of University Teaching: Autonomy and the Postformal Development of Thinking as Goals of Development in Adulthood

As a scientific discipline psychology focuses on examining human action and the ways in which it changes and develops over time. The word '*psykhe*', originating from the Greek language, refers to the 'mind', the 'soul', while the other root word forming the modern term 'psychology', '*logos*', refers to 'knowledge' or 'reason'.

The psyche, or the mind, which is often used as its synonym, is always in a state of dynamic change. The lifespan development of an individual is seen as a continuous and qualitative process of change where different 'levels' and 'stages' follow each other. In itself, developmental psychology is the foundation of all psychological research because there is no mental phenomenon without historically earlier layers and roots going back to childhood.

From the perspective of developmental psychology, there are general questions of adult development, and secondly, in this book in particular, more ***specific*** developmental questions concerning *university students and staff, who are living their young, middle and later adulthood*. The usually mentioned general 'developmental demands' affecting young adults involve the formation of an identity of one's own: one must become autonomous of one's parents and birth family, initiate intimacy and sexual relationships, separate oneself from home, educate oneself and, lastly, integrate oneself into a job one has selected and into working life in general. Most undergraduates are living their young adulthood, which means that in psychological terms they are dealing with these questions throughout their years at university. As regards university staff, that is researchers and teachers, they are going through the early and later middle-age phase of their life. The major developmental task associated with this period of life is generativity: it has been found that in middle adulthood one has a tendency and need to establish one's own 'life project', hoping to leave younger generations something new produced from one's own resources (Erikson 1980).

The issues discussed above are important from the viewpoint of the basic structure of adult life. Most importantly from the perspective of this book, the

development of the thinking skills that emerge in adulthood foregrounds topics which are of interest in the context of mass higher education and globalisation. That is, universities pursue a number of universal goals: *teaching students scientific knowledge* based on the latest results of scientific research, training them to think scientifically, and, in addition, instructing them in the basic elements of *critical, autonomous and individual thinking*[1].

During the last three decades, the post-Piagetian tradition of cognitive psychology has emerged as an important field as regards describing thinking of this kind (Alexander, Druker & Langer 1990; Commons, Richards & Armon 1984; Sinnott 1994; Sinnott 1998; Miller 2000). As such, since the early 1980s the hypothesis of postformal cognitive development has been put forward by many scholars especially in the USA, but later the discussion has become an international one (for its latest stage see Kallio & Pirttilä-Backman, in press; Baltes & Staudinger 2000). The basic argument of these scholars is that in qualitative terms adult thinking develops in a direction where the scope for autonomous and individualised thought is increasing all the time[2]. Today, this type of adult thought characterised by continuous development is called postformal thinking[3]. Postformal thinking in itself has as its core the idea of thought as an autonomous activity, even if every scholar seems to conceptualise the phenomenon in a different way.

---

[1] The word 'autonomous' is defined according to the Penguin Dictionary of Psychology (Reber (ed.) 1995) as '*controlled from within, internally controlled, self-regulatory*'.

[2] It is also possible to use 'self-directedness' as a concept loosely analogous to autonomy. Self-directedness features as a concept in the field of education. As such, the interrelationship between the twin concepts of autonomy and self-directeness might deserve further examination in the future.

[3] For the careful reader I must explain that 'postformal development' is used here as a descriptive word, not as denoting a developmental stage in a normative sense. Normative development from one stage to another is easier to observe during ontogenetically earlier development than in adulthood. This may imply that a human being's autonomy in adulthood gives them more freedom to select, evaluate and to be self-directed – precisely as it is argued in the postformal tradition of thinking in developmental psychology.

Research on adult cognitive abilities is widespread; it even has a name of its own: parallelling postformal thinking it has been termed 'relativistic dialectical thinking' (Kramer 1983). In the following, both words will be used as key concepts describing the topic of this article, the question of training students in autonomous thinking during university studies. It is also interesting that lately the concept of wisdom has been linked with this phenomenon (Baltes & Staudinger 2000). According to these authors, the concept of postformal thinking is actually very close to, or included in, the concept of postformality. Among their latest empirical findings is the surprising one that 'the major period of the acquisition of wisdom-related knowledge ... before early adulthood is the age range from about 15 to 25 years' (ibid.). Thus, the first signs of independent thinking emerge during one's upper secondary school and university years.

According to a meta-analysis by Deirdre Kramer (1983), the following assumptions about knowledge are typical features of postformal, relativistic dialectical thinking:

(i) realising the non-absolute nature of knowledge (relativism);
(ii) accepting that there are contradictions in knowledge; and
(iii) integrating contradiction into a totality (dialectical thinking).

These qualities have been demonstrated not only in the 'average' population but, actually, in groups of undergraduates in various parts of the world, though these 'stages' are named differently by each scholar, leading to what may be slightly different foci (Perry 1968; Commons et al. 1982; Demetriou & Efklides 1985; Kallio 1998).

Before self-directed and individualised thinking develops, young people reason in absolutistic terms. Assumptions about knowledge are absolute, core assumptions about the essence of reality static, that is, one believes that every problem has only one solution and that and basically 'there is nothing new under the sun' (by contrast, mature subjects believe on continuous development and change). In relativistic dialectical thinking, the self, autonomy and the individualisation of thinking become all the time more and more important issues (e.g. Labouvie-Vief 1980). Edelstein and Noam (1982) argue that it is only during adulthood that the self begins to coordinate different modes of thinking, which means that one must engage in some kind of 'metareflec-

tion' on different ways of thinking, world views and belief systems. In the field of scientific thinking one's reasoning is similarly supposed to become more independent. One selects independently, from a vast set of possible ways of explaining the given phenomenon, the principles which one will follow. *This is actually the core of all scientific studies and research.* To university researchers and students, contradictory explanations, theories and models are everyday phenomena. Given autonomy of thought, the importance of metacognitive, self-aware thinking is also enhanced (e.g. Commons, Richards & Kuhn 1982; Demetriou in press). On a very elementary level, metacognition may be defined as 'reflection on one's own cognition'. The 'highest' or most 'developed' form of metacognitive awareness has been identified also with postformal thinking because an exhaustive awareness of one's own actions, thoughts and behaviour implies the activation of functions of the self.

We need a fuller description of relativism and dialectical thinking. For example, Kramer and Bacelar (1994) consider that in adulthood, the following features are incorporated into autonomous thinking processes: (i) interdependence of cognition and affect; (ii) awareness of the pervasive influence of culture and history in the construction of reality and knowledge systems; (iii) questioning assumptions about the so-called absolute truths of Western civilization; (iv) promoting experiential and intuitive knowledge; (v) recognising the interplay among multiple systems in constructing reality; and (vi) recognising our global interdependence.

Rethinking Autonomy vs. Globalisation and Massification. How Are They Related in Modern University Teaching?

Globalisation. *Questions about globalisation and university teaching.* From the perspective of psychology, it may be assumed that autonomous, relativistic and dialectical cognitive development can be viewed as a mechanism for adapting to the 'megatrend' formed by the information society and globalisation (see also Kallio & Pirttilä-Backman in press). The complex cognitive processes described above may serve as coping mechanisms that allow humans to adjust to an almost uncontrollable environment. In the midst of a rapidly

changing society, the role of one's self as the critical subject of a process of selecting essential information is becoming more and more important all the time. At university, an ability to select and critically regulate, from a self-based perspective, scientific information is a nearly indispensable skill among both students and researchers and teachers as a defence mechanism against stress. Thus, a selective approach to and the self-directed filtering of incoming information function as a mechanism for balancing one's personality and emotional life. Without these protective mechanisms we would find it extremely difficult to maintain a healthy mental equilibrium.

Some interesting questions may, however, be asked here. Does globalisation automatically mean increased autonomy as it has been defined earlier – an independent understanding and integration of *different ways of thought?* Does it mean the survival of different thinking styles – national, local, cultural, and so on world views, values, scientific traditions – or does it mean economic pressure to limit oneself exclusively to Western culture as an absolutistic way of defining norms for thinking? Is globalisation a question of adopting some 'universal' mode of academic training and scientific thinking or does it imply locally modified, individually creative ways to enrich scholarly culture?

But surely globalisation can also have side effects that are positive in terms of the development of postformal thinking. Its best consequences may make for closer discussion between many different cultures, thus improving opportunities to create new scientific innovations because impulses from a diverse range of academic cultures are one precondition for an exchange of ideas. In summary, a consideration of globalisation from these two viewpoints reveals that it may be a double-edged question.

Globalisation and ways of reinforcing postformal thinking. Välimaa argues (chapter 1 in this book) that Finland has always laid and continues to lie on the borderline separating the cultures of Western and Eastern Europe. At the same time, Finland has, unlike many other countries in the world, had a very homogeneous culture. These are in themselves interesting sociological factors, and psychologically considered, the sociopsychological climate of the Finnish higher education system may reflect these facts. As such, a homogeneous higher education culture where there is no definite multicultural climate can produce absolutistic world views and excessively rigid traditions and schools of thought in the field of science and scholarship. However, all this is clearly changing in a situation where the intercultural exchange of students and re-

searchers is strongly encouraged, as it is today. International student exchange maybe defined as one aspect of globalisation (see chapter 3 in this book).

Considering the positive aspects, international student exchange may be a good example of globalisation as a factor that fosters postformal thought. This is a hypothesis which could be empirically tested, but more speculatively, becoming familiar with different cultural backgrounds and value systems may have a triggering effect on student thinking, and surely it will instil relativism and tolerance. In itself, it may teach students how differently academic cultures conceptualise the same things. The most creative act possible in this context may be the dialectical integration of the knowledge base forming one's own educational capital with the new innovative ideas of a multicultural academic environment. Cooperation between different world views, religions (Miller 2000) and traditions of thought is certainly emerging as an important activity in the future. International student exchange provides students with more opportunities to expand their mental horizons and, at the same time, to bring back new impulses to their own university. In this way, new innovations become possible as something old and something new come together in the scientific community.

Nevertheless, as is true of all the questions discussed in this article, we are again dealing with a two-edged issue. On the one hand, theoretical pluralism is in itself a part of any university, wherever it is based. It may be argued that autonomous, postformal thinking will develop naturally in *any* university without any special 'globalisation' – that is, every academic is certain to have their own favourites among scientific theories and models, and as they contrast these pluralistic visions of their teachers, students will surely learn comparative thinking and independence. Globalisation may, however, bring new elements into this pluralism by promoting multicultural diversity in the classroom (Kramer & Bacelar 1994). Nevertheless, this does not in itself guarantee the development of postformal thinking.

***Massification**. Are we dealing with experiential stress or with massification?* The word massification was originally defined on the basis of student numbers: according to Välimaa (chapters 2 and 3 in this book), at the beginning of the 21st century Finnish higher education offers student places to almost 70 per cent of the relevant age cohort. Also, the yearly production of doctoral degrees has more than doubled. In Finland massification has been understood as an unfailing indicator of poor teaching methods and practices in universi-

ties. The puzzling factor is, however, that the ratio between students and teachers in Finnish universities is not high in itself as compared with many other countries where entrance to universities is free and where there can thus be real problems with massification.

The findings of Kallio's (2001) study of the assessment of university teaching in a local Finnish university[4] suggest that it may be possible to use the phrase 'experiential massification' to describe this situation. It is obvious that university teachers do feel a great deal of stress because of the pressure of their work ('lecture groups are too big', 'there are so many meetings in this department that I have no time leftover for the students', 'there is too much of everything except for financial resources', 'study schedules are too tight'). Possibly this phenomenon might be called experiential teaching-related stress. 'Massification' could then be used as an explanatory variable for this subjectively experienced stress among teachers, but a closer consideration reveals that massification cannot be more than one among many stress factors, for example the pressure created by the need to ensure one's continued employment by one's university and other stressors, such as being unable to focus on research alongside one's teaching, too many administrative meetings and other such factors. In conclusion, it may be that massification has been used as the only explanation for university teachers' stressful situation even though a closer inspection shows that there must surely be many other stress-inducing factors affecting them.

Kallio's study focussed on an evaluation of the teaching practices of paired university departments. The interviews with the people taking part in the project made it clear that assessing teaching was perceived as something that is of secondary importance in universities, though there were also exceptions to this rule. One focus of my study was to appraise how postformal reflection deepened as a result of a one-year evaluation process. As was argued in the beginning of this article, an exhaustive metacognitive awareness is one of the signals of postformal thinking. As such, comparative evaluation of teaching practices between two departments is an experiment intended to 'compel' the

[4] The study, "Self- and Peer Assessment Method", was conducted in 2000–2001. Four university departments carried out a project to evaluate their own and another university department's teaching practices.

staff of the departments to use their postformal thinking abilities. The organisational evaluations of paired departments were successful in some cases but less fruitful in others. Some departments found the method beneficial as a means of learning something new and of reflecting on their own teaching methods with a view to understanding what they were doing wrong, while other departments failed to get anything useful from the department they were paired with. Moreover, from the perspective of globalisation it was also interesting to note that only one department chose an evaluation partner from abroad, in this case a department at a Norwegian university. All the other departments found partners in their own university or in some other Finnish university.

The fact that a mass university, operating within a mass higher education system, trains professionals for the labour market (e.g. psychologists, economists), is in itself related to critical thinking. In the modern information society everybody needs skills which have to be developed at university – such as critical and independent thinking. To mention an elementary example, critical media literacy is a skill needed by every independent adult, as is the ability to read critically about scientific findings in journals and magazines, or 'surf' the Internet. Thus, being trained in autonomous thinking will be essential in any case, wherever the students will find themselves a place in working life.

The pressure to organise university teaching in ways requiring students to attend crowded lectures reduces the scope for individualised tutoring and counselling. The question of how students are to be trained in autonomous thinking in mass higher education is crucial indeed. There is a contradiction here: on the one hand, our psychological knowledge of adults tells us that they are autonomous, individualised subjects who are critically aware as they separate facts from non-facts; on the other hand, the teaching practices applied in massified universities may not accord with this developmental task faced by growing adults. If massification is identified with crowded lectures and surface learning practices, it can be questionable whether such developmental tasks are really being taken into consideration in modern universities.

Final Remarks

Training people in autonomous thinking: A solution to the problems of massification? Another question facing us concerns ways in which teaching could be improved in modern mass higher education systems. How can autonomous thinking be promoted through mass lectures? What kind of enrichment methods should university teachers use to achieve this aim? What kind of teaching methods are the best tools for fostering mature thinking? In a mass higher education system, it is absolutely impossible to pay attention to the individual characteristics and personality factors of every single student. In the scientific community, the autonomy of any information means that we are able to and must be constantly taught *to evaluate* scientific knowledge, *to contrast* scientific results, and, in an ideal situation, to draw from them our own, *independent conclusions*. This might be the ideal state of autonomous thinking. Such training means, at the same time, that extrinsically oriented students are taught to think intrinsically. The importance of students' own inner activity is foregrounded (see chapter 5 in this book).

There have been empirical tests of whether it is possible to train students in autonomous thought. For example, Kallio (1998) tested trainability for postformal thought in a group of first-year university students, focussing on how well the students master the coordination of multiple thought systems. The first-year students' ability to autonomously integrate different thought systems was not high at the start of the training programme. Of the 101 first-year students, about 40 were found to be altogether incapable of reflection and the self-directed integration of different ways of thinking. Only 4 students achieved the highest rank of dialectical thinking; this finding has been previously confirmed also internationally (Commons et al. 1982; Demetriou & Efklides 1985). In Kallio's study, it proved possible to improve the standard of independent thinking among the subjects during a training programme even though the programme lasted only six weeks. In another study by Kallio (2000), four university teachers representing various disciplines were tested for their autonomous thinking abilities. Only one of the four teachers filled the criterion for this form of thinking. Despite being a case study of four teachers, the investigation may indicate that access to mature, autonomous thinking is not necessarily very common even among university staff. However, the finding must be confirmed by examining larger groups of subjects.

Another consideration is the adoption of new methods to reinforce self-directed learning previously used mostly in open university education (see chapter 8 in this book). For example, distance education and providing access to university studies through the virtual university will surely become increasingly important in the future. Technology-based virtual learning methods will certainly also be one possible new innovative strategy available in a mass university system, also making it possible to reach large groups of students simultaneously. Globalised education in the form of virtual education is within reach, and the interconnectedness of different cultures is thus even closer at hand, which is one more factor promoting postformal thinking.

The Humboldtian idea of university: Alternative university systems as a possible antithesis of modern mass higher education? The Finnish version of the Humboldtian university had less students than today's university. This does not in itself guarantee more individualised teaching, tutoring or counselling practices. The administrative structure of universities – whether Humboldtian or that of a mass higher education system – as such cannot be an indicator of a superior quality of education or of a university's focus on training students in autonomous thinking. The important element are many other factors which may or may not affect the actual situation, such as teachers' motivation to teach purposefully, their awareness of how scientific thinking and a critical attitude towards information can be taught, their ability to organise their schedule so as to allow time both for research and teaching without causing stress. Among other things, these factors ensure teachers a basic sense of confidence, which in itself will give a teacher more scope for modifying their instruction. Professional motivation and love of teaching are also absolutely necessary factors, and they are not problems of the university system but of the individual. The claim that either model of university is better as such is doubtful. From some perspectives it can be more stressful to teach in a mass university system, but the Humboldtian university can also have stress factors of its own. And in both university systems it is possible to train students in autonomous thinking: for example, there are instances of such training in Kallio's (2000) book about university teacher's projects to develop their teaching practices in modern mass university by instructing large student groups using new teaching methods. Thinking innovatively with the aim of creating teaching strategies of a new kind is not forbidden in a mass university.

In a mass higher education system, management by results and an emphasis on 'production' in universities create pressures on students and staff to speed up the production of theses or scientific results. It may be asked whether it is possible to develop truly autonomous thinking over short periods of time without drastically changing teaching methods and practices towards purposeful training in these skills. Is it easy to train people in autonomous, wise thinking? What kind of schedules should be arranged to make it possible? Being productive at university means intense competition for publication in international journals, which is time not available for investment in teaching and counselling students, developing teaching practices and for maintaining one's general motivation to take part in continuing professional training. Thus, there is a vicious circle here. How is it possible to combine, among university staff, demands to improve teaching with the pressure for high scientific productivity? It may also be argued that the need to be productive deprives teachers of their academic freedom and individual ways of thinking and acting in academy (see also chapter 5 in this book). This may be one consequence of the 'marketisation' of university, making it possible to doubt whether basic tasks of universities are really being fulfilled.

Such a massified and marketised university may give further impetus to a search for alternative forms of university life. There are already other institutions outside the official university system which have as their educational philosophy a different view of university teaching – for example, universities based on anthroposophical world views (Waldorf colleges around the world focussing on teacher training, such as Snellman College in Helsinki, Finland. Similar colleges and universities exist also in, for example,Germany and the USA). These colleges' student intake is small, and the basic aim of their teaching is to organise education on the basis of a world view drastically different from our own. Besides the colleges mentioned above, there are also other pedagogical alternatives grounded on different ways of understanding education, such as the respective pedagogies of Freire and Krishnamurti, not to mention still further alternatives. The point is that if the quality of the teaching delivered and the learning enabled in the massified university is perceived as poor, then the system itself may find itself facing outside competitors, and there can arise a clear "demand" for universities that are better at teaching their students and helping them to learn, more individualised and higher-class. The emergence of private universities in Europe may be seen as an indi-

cation of teachers' and students' frustration with a mass higher education system.

Kincheloe, Steinberg and Villaverde (1999) underline emphatically that educational policy should be completely reconceptualised, including policies on university education, where typical viewpoints have represented 'white, Western European, male, middle- or upper-middle-class culture'. For example, incorporating feminist pedagogical principles into university pedagogy may be an example of a link between emotion and affect, a feature which has been discussed also as a characteristic of postformal thinking in the earlier sections of this article. An experiment in introducing some principles of this kind of pedagogy into university education was recently conducted in Finland (see Lautamatti 2000) with the aim of encouraging democratic principles in the interaction between students and university teachers during teaching sessions. Arts have also been added to university pedagogy as a means of training students in scientific thinking (Nikula 2000). These innovations may be signals that there is increasing dissatisfaction with the teaching practices of the modern mass higher education system.

Some of the ideas presented in this article are summed up in Figure 1. Briefly, I have tried to demonstrate that all the questions and concepts discussed in this book are surely two-edged phenomena in their essence. Autonomy is the basic developmental aim of adulthood; we become 'mature' only after having been educated externally during childhood and youth. But autonomy as such is not enough. We interact constantly with other people, and we should coordinate our independent ways with the thought of others. Although autonomy has been the core of this article, it must be remembered that a human being is always cooperating with the external world and is always also extrinsically directed. This is again an area where we are in the midst of theses and antitheses: we have to follow, for example, the laws and regulations of our society, but at the same time we must never lose our self-directness in making decisions. Autonomy as a concept has something in common with globalisation – we have to make our own intellectual contribution to different ways of thinking, nationalities, world views, scientific traditions and religions. If globalisation is understood as homogenous, absolutistic thinking based exclusively on the values of a single culture, it may be a much more problematic trend. Massification has similar two-edged characteristics. On the one hand, there is the fact that as measured by the numbers of incoming

students, the Finnish university system has clearly expanded. On the other hand, the teacher-student ratio is not high. Simultaneously, however, perceived stress indicates that there are some problems which can have an effect on a teacher's ability to cope with the demands of and the need to further improve high-quality teaching.

Lastly, I would argue that independence of thinking should become the focus of efforts to cope with the complexity of mutually contradictory viewpoints that are a natural feature of the modern world. These contradictory viewpoints may involve, for example, the integration of two scientific explanations of the same phenomenon. Fostering personal development and independence should be a part of the basic values of every educational system and a part of our (Western) way of thinking, and, possibly, a part of the present period of the history of our ideas about the nature of humanity. Individual counselling, promoting autonomous thinking capabilities and fostering independent, critical thinking are absolutely essential in a globalised media and Internet world. It is clear that innovative action, studying and research are possible only at university, where freedom to study and pursue research is possible, and where debate, disagreement and critical discussion are encouraged. These factors also foster democratic principles of education, which have been a cause of concern among some students of postformal thinking (Kincheloe et al., ibid.).

Figure 1. Absolutism, relativism and dialectical thinking as three forms of adult development and factors that reinforce/contradict them in university teaching.

ABSOLUTISM

* world views and scientific truths as given
* being stuck with a single way of thinking
* inability to expand one's perspectives through alternative explanations

⇩

WAYS OF REINFORCING THEM IN UNIVERSITY EDUCATION AND CRITICAL COMMENTS

* homogenous traditions of science as taught in university curriculum
* no debates between scientific ways of thinking
* may result in a single-truth system of thinking

****

RELATIVISM

* an awareness of multiple ways of explaining the same scientific phenomenon
* no attempt to evaluate them independently; a laissez-faire attitude towards multiple systems

⇩

WAYS OF REINFORCING THEM IN UNIVERSITY EDUCATION AND CRITICAL COMMENTS

* teaching multiple theories, models and hypothetical systems while describing a phenomenon
* debating between traditions encouraged, but independent thought not encouraged (i.e. students not encouraged to draw their own conclusions about the theories/models/assumptions taught)
* may result in a chaotic world view lacking any clear commitment to anything

****

DIALECTICAL THINKING (AUTONOMY)

* an awareness that there are multiple systems of thought, but the emphasis is laid on critical, independent reflection on these systems
* recognition of the interdependence of things (e.g. global interdependence of nations and the economy)

⇩

WAYS OF REINFORCING THEM IN UNIVERSITY EDUCATION AND CRITICAL COMMENTS

* critical thinking habits: not accepting anything at face value but assessing and weighing things
* integrative thinking habits: being able to integrate theories, models, world views; in psychology, for example, the integration of emotion, will, and cognition
* teaching multiple theories, models and hypothetical systems while describing a phenomenon
* free discussion, evaluation, debate, where students form personal opinions
* students are encouraged to draw independent conclusions from existing scientific results
* multiple world views are contrasted, cultural differences are understood by evaluating their similarities and differences

References

Alexander, C., Druker, S. & Langer, E. 1990. Introduction: Major issues in the exploration of adult growth. In C. Alexander & E. Langer (eds.) Higher stages of human development. New York: Oxford University Press, 3–32.

Baltes, P. & Staudinger, U. 2000. Wisdom. A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. American Psychologist 55(1), 122–136.

Commons, M., Richards, F. & Armon, C. (eds.) 1984. Adult development 2: Comparisons and applications of adolescent and adult developmental models. New York: Praeger.

Demetriou, A. (in press). Mind, self and personality: Dynamic interactions from late childhood to early adulthood. Journal of Adult Development.

Demetriou, A. & Efklides, A. 1985. Structure and sequence of formal and postformal thought: General patterns and individual differences. Child Development 56, 1062–1091.

Edelstein, W. & Noam, G. 1982. Regulatory structures of the self and 'postformal' stages in adulthood. Human Development 25, 407–422.

Erikson, E. 1980. Identity and the life cycle. New York: Norton.

Kallio, E. 1998. Training of students' scientific reasoning skills. Jyväskylä Studies in Education, Psychology and Social Research 139.

Kallio, E. (ed.) 2000. Itsensä näköinen yliopisto-opettaja (Being oneself as university teacher). University of Jyväskylä: Institute for Educational Research.

Kallio, E. 2001. Deepening one's awareness and thinking through assessment of teaching? Manuscript in preparation.

Kallio, E. & Pirttilä-Backman, A.M. (eds.). (in press). Developmental processes in adulthood – European research perspectives. Journal of Adult Development, European Special Issue.

Kincheloe, J., Steinberg, S. & Villaverde, L. 1999. Rethinking intelligence. New York: Routledge.

Kramer, D. 1983. Post-formal operations? A need for further conceptualization. Human Development 26, 91–105.

Kramer, D. & Bacelar, W.T. 1994. The educated adult in today's world: Wisdom and the mature learner. In J. Sinnott (ed.) Interdisciplinary handbook of adult lifespan learning. Westport, CT: Greenwood Press, 31–50.

Labouvie-Vief, G. 1994. Psyche and Eros. Mind and gender in the life course. Cambridge, NY: Cambridge University Press.

Lautamatti, L. 2000. Opetuksen kehittäjät vuorovaikutuksen pyörteissä (The developers of teaching in the dizzy whirl of interaction. In Kallio, E. (ed.) Itsensä näköinen yliopisto-opettaja (Being oneself as university teacher). University of Jyväskylä: Institute for Educational Research.

Miller, M. & West, A. (eds.). 2000. Spirituality, ethics and relationship in adulthood. Madison, CT: Psychosocial Press.

Nikula, T. 2000. Kielioppi kiehtovaksi piirrostöitä käyttäen (Making grammar fascinating through drawings). In Kallio, E. (ed.) Itsensä näköinen yliopisto-opettaja (Being oneself as university teacher). University of Jyväskylä: Institute for Educational Research, 129–140.

Perry, W. 1994. Forms of intellectual and ethical development in the college years. New York: Holt, Rinehart & Winston.

Piaget, J. 1976. The psychology of intelligence. Totowa, NJ: Littlefield, Adams & Co.

Reber, A.S. (ed.) 1995. Penguin Dictionary of psychology (2nd edition). London: Penguin.

Sinnott, J. 1994. The relationship of postformal thought, adult learning and lifespan development. In J. Sinnott (ed.) Interdisciplinary handbook of adult lifespan learning. Westport: Greenwood Press, 105–119.

Sinnott, J. 1998. The development of logic in adulthood. Postformal thought and its applications. NewYork: Plenum.

Chapter 5

SANNA HONKIMÄKI

Going to School at University?

Introduction

A few years ago I evaluated university students' experiences from learning and studying in a department of teacher education. The first-year students were asked about the start of their university studies. As I read their answers, I found myself puzzled about the way they wrote about their studies. Several times I came across such expressions as 'school', 'schoolmates', 'going to school' instead of 'university', 'fellow student', 'university studies'. I assumed that the habit was caused by the fact that at the department of teacher education the students' studies revolved around school life, but this was an insufficient explanation. A psychologist with the local university health service had noticed the same turn of phrase. According to her, over the last few years all students had become more school-oriented in their talk than the earlier student generations had been. (Pahkinen 2000.)

The idea that universities are becoming like schools is not a new one. As early as towards the end of the 1970s it became an issue in discussions in the field of international higher education research (Gasch & Wissner 1981). This phenomenon affected universities representing the German Humboldtian tradition. In Finland these arguments were reinforced by a reform of the tertiary degree system and reforms of university administration carried out at the turn of the 1980s. New degree programmes were designed, and all study fields were made to fit into a single administrative structure.

Aittola (1992) and Silvonen (1996) have gathered together the main statements made about changes in university studies and in students brought about by these reforms. The following arguments assume that students did change: a 'new student' was born. The most essential characteristic of the new student is their relationship with university, different from that of the traditional student: it is more instrumental, achievement- and vocationally oriented. These extrinsically motivated students are less committed to university as an institution and appreciate scientific knowledge less than students once did. They are highly individualised, and university studies do not determine the core of their identity: primarily they are not students but citizens. They do not think that studying adds much to their everyday life. They are less active in the sense that while they do pursue their studies they are less eager to take part in decisions about, for example, the content and organisation of their learning. They study under heavier pressure and set themselves to achieve better study results. Students are ceasing to see university as a centre of intellectual activity, and university studies are becoming school-like struggles with ready-made degree programmes against a background of constantly expanding qualification requirements. Students feel that they have few opportunities to follow their own study interests. (Aittola 1992; Silvonen 1996.) More polemic writers might even argue that students will sink into apathy as university studies become an extrinsically planned and conducted process that prevents students from engaging in meaningful learning processes (Matthies 1988).

We may think that because universities have become mass institutions – they are no longer able to offer students any special elite position and that students see no great difference between life at upper secondary school and life at university. Their relationship with university has changed. Perhaps university today means nothing more than an extension of one's school years and a route to working life.

In the following sections I shall take a look at how the curriculum and the approaches to teaching and learning linked with university studies have changed. Can we assume that the way in which students talk about university and university studies is a symptom of some real change in these institutions and activities?

The Student in the Mass University

Increasing Numbers of Beginners and Graduate Students

The number of young people who complete upper secondary school and gain entry to university in Finland has been growing since the mid-eighties. In 1985 the proportion of new university students in the age cohort was 16.9 per cent, in 2000 30.4 per cent. The increase in the number of new students from 1985 to 2000 was 56 per cent (7 125 students). During the same period the total number of students grew by about 73 per cent (66 475 students). (Suomen tilastollinen vuosikirja 1986, 2000; KOTA data base 2001.)

While the number of teaching staff has remained almost the same through recent years, the figures for basic degrees (in Finland master's degrees) completed have nearly doubled. There has been an even sharper rise in figures for doctoral degrees. Since the early 1990s the number of university graduates has increased by 37 per cent, that of new doctors by 136 per cent. (KOTA data base 2001; Table 1.)

Table 1. New and all students, teachers, and completed basic and doctoral degrees in Finland in 1985, 1990, 1995, and 2000 (KOTA data base 2001).

	1985	1990	1995	2000
Students:				
new students	12 794	16 013	18 679	19 919
all students	90 720	110 680	135 107	157 195
Teachers	7 169	7 788	7 820[1]	7 861[2]
Degrees:				
basic degrees	6 526	8 423	9 819	11 515
doctoral degrees	292	490	765	1 156

[1] The number includes teachers on budget funds (7550 persons) and on external funding (270 persons).

[2] The number includes teachers on budget funds (7371 persons) and on external funding (490 persons).

93

Traditionally, students came to university as a homogeneous group of young people immediately after they had finished upper secondary school. In the last thirty years, however, university students' age distribution has changed a great deal. The proportion of students aged 30 years and over in all students increased sixfold from 1967 to 1996 (Moore 2000). In 1999 the figure was 25 per cent (Lempinen & Tiilikainen 2001). Though the number of older students fall slightly during the last years of the 20th century – by four per cent from 1994 to 1999 – students' age distribution still makes them a very heterogeneous group. The fact that older students are in a different phase of their life span from younger ones means that older students are more often married and work more than younger students (Lempinen & Tiilikainen 2001).

In 1985, a student was one among 13 students per a member of university teaching staff: professors, lecturers, assistants, and full-time teachers. In 2000 there was one member of the teaching staff between 20 students. (KOTA data base 2001.) Thus, the period saw a 54 per cent decrease in the student-teacher ratio. This trend is partly due to the expansion and massification of higher education, partly a consequence of budget cuts made in the early 1990s.

Students' Economic Situation

The economic recession of the early 1990s affected also students' economic situation (see chapter 2 in this book). In Finland, university students have been placed on the same footing as other people on a low income. Earlier, a student usually raised a student loan, but in 1992 the student financial aid system was reformed and the value of the student grant was increased. All Finnish students are given a student grant and a housing allowance as a form of student financial aid. Apart from these, students have three alternative ways of financing their university studies: raising a loan, asking their parents to support them, or working during their studies. The student grant as such is not big enough to live on – university studies themselves are free of charge in Finland – and students seem to prefer working as a means of supplementing their financial resources.

It now seems that increasing the student grant and shortening the period during which it can be enjoyed (now 55 months) did not make students work less. On the contrary, over half the university students have term-time earnings. Students do not want to live on credit, and very few take out a study

96

loan. Only 13 per cent of university students raised a study loan in the academic year 1998–99 (Lempinen & Tiilikainen 2001.) The recent recession, unemployment and changes in working life, with more jobs now temporary, have made the student loan less an opportunity than a risk. As one student put it: 'You don't dare raise a study loan, things are hard enough as it is' (Purhonen 1995). The authorities have also contributed to making work a more attractive option by raising, in 1998, the income limit for eligibility for a study grant, thus allowing students to earn more without losing their study grants (Lempinen & Tiilikainen 2001).

The School-going Culture of the Student Generations of the Mass University

Study and Work

Working while studying is quite common among university students in Finland: over 50 per cent of them have term-time earnings (Lempinen & Tiilikainen 2001). Student days seem to have ceased to be a separate period of life when people concentrate only on their studies – educate themselves – and on university life. Working alongside one's studies is one of the things which, it has been argued (Aittola 1992), prevent today's students from engaging in traditional university studies.

What are students' motives for working? According to Aaltonen's study (1992), the most central ones were improving one's standard of living and acquiring work experience. The more closely related a job is to a student's own study field, the more important is the accumulation of work experience as a motive for working. Among the less frequently mentioned motives are, for example, securing a means of living, expanding the scope of one's life, and lacking interest in university studies. Motives can also vary according to field of study and geographical area. A comparative study found that students in technological fields and social science students had the strongest motivation to work and that technology students worked full-time more often than other students. Social science students differed, however, from students in technological fields in that they spent more time on independent studies. Education and natural science students studied the longest hours. Working is more com-

mon among students in the metropolitan area than elsewhere in Finland because the cost of living is higher and job opportunities are better in and around Helsinki. (Lempinen & Tiilikainen 2001.)

Working naturally affects the amount of time that students have available for studies. On the average, working students study 19 hours weekly while those not working spend 35 hours on studying independently or on attending lectures or seminars (Lempinen & Tiilikainen 2001). Working does not, however, seem to mean giving up studying, at least as far as the majority of the students are concerned (Aaltonen 1992). These two activities complement each other, though there can be also difficulties with combining them. According to a recent study, about 40 per cent of students considered that combining studying and work was a very problematic task (Lempinen & Tiilikainen 2001). Those students who studied full-time both officially and in practice rated it less difficult than did those actually studying part-time. According to research on second- and fifth-year students, about 70 per cent of the respondents thought that working during the academic term had delayed their studies at least to some extent, while a third considered the delay a substantial one (Vesikansa et al. 1998).

Nevertheless, a considerable number of students exploit their term-time working systematically in constructing themselves a career, thus creating a positive link between work and studying (Aaltonen et al. 1997). According to Aaltonen and others, it seems that work assignments connected to a student's own field motivate the student to do well in their studies. Particularly in study fields which do not prepare students for a specific profession, working can be very important in giving a student a clear picture of the practices of their future field, their prospects on the labour market, and their own competencies (Aaltonen et al. 1997). Thus, work experience improves students' chances on the labour market. It has been observed that when a student has work experience which matches their study programme and their university department has links with working life, this enhances the student's motivation to graduate (Vesikansa et al. 1998).

Studying as a Phase of Life

University students in Finland seem to enjoy academic freedom[1] – at least compared with polytechnic students – because there are no regulations governing graduation times and because students can decide for themselves how they schedule their studies and how they use their time, how much they study and how much they work (Lempinen & Tiilikainen 2001). What do the students themselves think about their university studies and how do changes in society and at university affect them? Can we expect to find any differences between these two student generations – students in the 1980s and students in the 1990s?

In 1986, at the time when the changes in the Humboldtian university had already began in Finland, a hundred students representing different disciplines were interviewed in a study of the temporal differentiation of university studies and the fragmentation of subject cultures (Aittola 1992). According to the main findings of the study the student years had ceased to constitute a distinct life stage, free student life, being instead divided between studying and part-time employment. Secondly, students were struggling with economic and social instability which hindered the development of personal identity. Thirdly, independent and vital student cultures had fragmented into a variety of subcultures, with only physical exercise and a focus on close friends as a common feature. Furthermore, different discipline-based subcultures divided students more and more sharply. Fourth notion was that students' increasing work activities and leisure-time hobbies were pursued outside university. Finally, Aittola (1992) stated that the curricularisation of university had instrumentalised the study process and the students' relationship with university.

In 1995, after the recession and a reform of the student financial aid system, students' attitudes were examined from a perspective of university students' changed coping strategies in a changing society (Helenius 1996a). According to the study, the new approach to studying was pioneered by students who had created their own atypical analysis of higher education by combining study fields in different ways and by shuttling between scientific worlds, para-

[1] In the traditional Humboldtian university academic freedom consisted of three matters related to each other: (professors') freedom of research, university's institutional autonomy, and students' freedom of choice.

digms, and higher education institutions. Individualised young people have ceased to see the time they spend at university as a separate period, student life; instead, university studies were defined as a part of an identity project, an aspect of identity construction and mastery of life (Helenius 1996b). Thus, instead of concentrating on living a 'student life' students pick from their studies at university those things they think they will need in the construction of a career of their own, reflecting constantly on their prospects and choices. Every choice, however, carries also a personal risk. According to Helenius (1996b), studies crossing disciplinary boundaries, multidisciplinarity, emphasising selectivity, tailoring one's studies to one's personal needs, and responding rapidly to the stimuli of working life have become more relevant as study strategies among university students in recent years.

It seems that the changes occurring in working life and their connections with student lives constitute the biggest difference when the students of the early 1980s are compared with those of the 1990s. Since the recession it has been clear that a university degree is no longer a ticket to a secure career. The public sector is employing less university graduates, and enterprises are buying individuals, not degrees. The scope that well-educated people have for moving horizontally, vertically and globally have changed to a remarkable degree. (B. Helenius 1995.) The structural changes in working life have also rapidly created a great number of what are known as atypical jobs (part-time work, hire work, fixed-term work contracts) (Aaltonen et al. 1997).

According to the traditional idea of university, university education is expected to provide students not only with knowledge and understanding but also with the ability to use the things that they have learnt for fostering their personal development. But are they now, rather, using university just for the acquisition of material benefits? Silvonen (1996) supports this argument because he has noted that today's university studies do not constitute the most important part of university students' identity, with the result that they are less personally involved in their studies and more passive as learners: they are consumers making use of the services of university (Silvonen 1996). This phenomenon was reinforced in the 1990s by the arrival of the discourse of efficiency. It seems, however, that the massification of higher education with more heterogenous student population and diversified higher education institutions have increased the range of approaches to studying in university (see chapter 3 in this book). Namely, according to a study of student attitudes, there may

100

be defined three main approaches to studying (Lempinen 1997). University studies could, first, be considered as a phase or a way of life, or even as an adventure in or an expedition to the world of knowledge. Second, some of the students thought that studying is simply a type of work and nothing more and that time spent on studying is just ordinary life. The third approach to university studies was more purposeful: studying was seen as a process of constructing professional skills and competency. When the students were asked to evaluate different things as a source of study motivation, they mentioned first the desire to develop and educate themselves. Almost as prominent was the wish to graduate and obtain professional qualifications. Over half the respondents mentioned an interest in scientific knowledge as an important factor. (Lempinen 1997.)

Teaching and Learning in Mass Higher Education

University Studies in Transition

In recent years, university studies have become an issue of debate. The fact that the debate has been a public one is a new phenomenon in Finland. Barnett (1992) is helpful in defining the dimensions of this debate. Apart from the effects of the learning society, it is the increased interest in the quality of student learning that has made university studies an object of public debate. Barnett distinguishes four factors lying behind this interest. Firstly there is the emergence of a mass higher education system; students constitute a larger and more heterogeneous group than earlier. It could be asked whether the learning society (or the learning organisation) is, in fact, an aspect of a mass higher education system. From this perspective, it may be argued that learning enables people to achieve economic well-being and personal growth. Moreover, in our society it makes economic sense to invest in people by giving them an education. Increased educational provision and demand raises questions also about the content to be learnt. What is worth studying: facts, problem-solving skills, transferable skills, or learning to learn?

Secondly, those responsible for teaching are better informed about research on student learning than before. The third reason, in addition to the effects of the learning society and an interest in the quality of student learning, that

underlies public interest in university studies is the question of the professionalism of academics as teachers. If learning is not only about the transmission of knowledge, what is the responsibility of university teachers regarding the promotion of student learning? Furthermore, when funding diminishes, the efficiency and effectiveness of teaching become more and more important considerations.

In Finland, one of the latest crucial phenomena associated with today's university teaching and learning is the increasing demand for quality. This demand has two dimensions. From the perspective of society the improvement of quality of teaching and learning means better value for money. From the perspective of institutions there can be found at least three reasons for this: the recession, the establishment of polytechnics (AMK institutions), and the growth of academic unemployment (Parjanen 1998). Threatened by a weakening of their institutional economy, universities have encouraged their teachers to develop their pedagogical skills in an attempt to improve their operations. Universities are also about to compete with each other concerning the quality of their teaching. The emergence and development of polytechnics have inevitably led to comparisons and challenged universities to develop their weak points. Teaching has been one of them. The third issue is the new phenomenon of academic unemployment, which has persuaded universities to take seriously the demands and wishes of working life and of their own alumni. Similarly, today's students know what they want from their university studies. Consequently, there is more evaluation taking place in universities because part of the allocation of resources to universities depends on evaluation findings.

Problems Related to the Mass University

The problems of teaching and learning are caused not only by the massification of the higher education system but also by the funding cuts in Finnish higher education which have increased especially mass lectures (see chapter 2 in this book). Karjalainen (1995) considers the adoption of roles – the role of a teacher and the role of a passive student – a danger to real learning during mass lectures. He is not arguing that lecturing is a poor teaching method, but he does emphasise the importance of the learner's own activity in the construction of their knowledge and understanding. Some research on students

includes student reports that a course-based degree programme consisting of mass lectures fails to foster a personal commitment to one's university studies (P. Helenius 1995).

The situation in Finnish higher education can be described with the aid of Biggs (1999), who outlines the changes that have happened in the past ten years in university teaching as follows: 1) there is considerable variation in ability within the student body; 2) students are more diverse as regards age and experience, motivation, socio-economic status and cultural background; 3) classes have increased both in size and in diversity, and fewer staff are teaching more students; and 4) more courses are vocationally oriented than used to be the case.

From the point of view of the Finnish higher education system (though not necessarily from that of the individual student), prolonged studies are a serious problem. They stem from term-time working, resource problems such as insufficient provision of summer teaching during the three-month vacation between the two terms of the Finnish academic year and the inadequate numbers of course books stocked by university libraries. Problems are also caused by heavy examination requirements and a studying atmosphere that offers students little encouragement, and little interaction between students and teachers. There is too little tuition. International student exchange has also been observed to lengthen university studies. (Vesikansa et al. 1998.)

Demands Concerning Curricula

Traditionally, the content of university curricula and the nature of teaching strategies have been based on disciplines and fields of inquiry. The knowledge structure of a discipline has determined the content of teaching materials and the order in which it has been presented (transmitted) to students. According to old academic tradition, the teaching event has been the concern purely of the lecturers and the students. Gradually, however, many societal changes have aroused public interest in university learning. The wider society and especially working life have many demands concerning the university curriculum and university studies. Furthermore, advances in international research on learning have challenged the old traditions; earlier conceptions of the relationship between teaching and learning have become questionable when new knowledge about how an individual learns has accumulated.

About ten years ago, Barnett (1992) illustrated the pressures for curriculum changes in higher education through a diagram (Table 2). One of its axes presents curricular orientations which are internal or external to the academic community, the other axis teaching aims with a specific or a more general intention.

Table 2. Changing structure of curriculum objectives according to Barnett (1992, 12).

	Specific teaching aims	General teaching aims
Internal (educational) curricular orientation	**(A)** Discipline-specific capabilities	**(B)** General intellectual capacities
External (vocational) curricular orientation	**(C)** Profession-specific competencies	**(D)** Transferable personal abilities

Box A represents the traditional way of understanding the basis of the university curriculum. The most obvious change has been a shift from Box A to Box C. In Finland, this was the change that the opponents of the degree reform at the turn of the 1980s were criticising. Barnett (1992) considers that Box D is exerting increasing attraction. Barnett predicts that in the future, transferable personal abilities (e.g. communication skills and mastery of information technology) are going to be the most inviting competencies. Higher education has been challenged by the qualifications of new kinds foregrounded by today's expertise and professionalism (Allan 1996; Tynjälä et al. 1997; Tynjälä 1999). Modern working life calls for new qualifications which are less narrow than earlier ones. Because working life is changing, the ways in which one prepares oneself to enter it are also changing.

There are changes to be seen: comprehensive experiments in curriculum design have been conducted. Such experiments – or projects turned into permanent practices – on reforms of the whole curriculum have been grounded on principles such as problem-based learning (Poikela 1998) or project learning (Olesen & Jensen 1999). A number of experimental interdisciplinary degree programmes have been established in the universities of Finland.

Developing Teaching as a Reaction to the Problems of the Mass University

It seems that in order to survive and develop, university has been forced to take on a new task along with its traditional ones, research and teaching. This new task is enhancing the quality of teaching and learning. In Finland, universities have approached this task in different ways. In the following I will analyse more profoundly these development projects in the University of Jyväskylä. The case study opens, however, a perspective to the nature of development activities even though the processes of development have varied in different higher education institutions.

The policy implemented in the University of Jyväskylä is based on the idea of supporting individual teachers or departments in their own teaching development projects, with teachers and departments applying for grants to fund their projects for developing teaching and learning. In 1995–97 the number of applications submitted was 255, of which 77 received financial support from the university. A study was conducted to analyse and evaluate these development experiments (Honkimäki 1997). It was found that *the production of learning materials* (31%) was the most popular object of developmental activities. Next came *evaluation of studies, teaching, learning and learning materials*, and *the adaptation of educational technology* for specific uses (both 17%). Four target areas accounted for 8% each of all funding applications: *developing the structure and content of degree programmes, improving teaching methods and work practices, designing new study modules, and conducting general inquiries*. Last came the *further training of university teachers* (3%).

The initiatives to *develop learning materials* are probably a response to deficiencies in resources, though in many cases the developers mentioned pedagogical reasons for their work. One of the most common reasons cited was fostering students' working methods, for example by means of a pedagogically structured book to enable self-directed learning or videotapes to illustrate things and encourage thinking. Growing use of distance learning in the Open University has created a need for learning materials which are student-centred and flexible and promote self-regulation. In a situation where student groups were getting bigger and the responsibility for learning was more and more on the students' own shoulders contact teaching was sometimes replaced by, for example, an exercise book produced by the students either alone or in

collaboration with the teacher. Increasing internationalism was also reported to have an effect on the production of learning materials. (Honkimäki 1997.)

An interest in *evaluation* indicates an aspiration to create a basis for continuing development work. Evaluations were made at all levels: whole faculties, departments, or students. A faculty or department wanted to maintain a high standard of teaching also in the future, developing an evaluation system of its own to achieve this aim. Sometimes students were also active in organising a feedback system. The importance of developing a flexible means of gathering feedback and using it to improve teaching and learning was commonly accepted. There were many reasons for developing evaluation systems: combatting dropping-out, helping students with learning difficulties, responding to the reduction in personnel resources and the need for models of self-evaluation in teacher training, improving learning results, and creating a positive learning atmosphere. It was thought that process and evaluative portfolios would make students' vocational qualifications visible and improve their prospects in working life. Evaluation also gave teachers material they need for their own portfolios of pedagogical merits. (Honkimäki 1997.)

In many cases, those *adapting educational technology* seemed to be very interested in its use in teaching and especially in its relevance to learning. Very often, however, attempts to investigate the effects of educational technology on learning failed even though some studies were monitoring students' learning results. In many experiments one could sense an enthusiasm for the new possibilities of educational technology – and for the possibility that resources would be saved: supervising theses across national boundaries, international experts giving lectures in many universities at the same time over a video link, teaching a student to play an instrument through distance learning, and giving students opportunities to establish contacts with the networks of working life during their studies at university. At the same time, the developers realised that their resources were limited and that extra work and expert knowledge were needed in adapting educational technology to specific uses. (Honkimäki 1997.)

Reforming a whole degree programme meant undertaking a formidable task that required one to make profound changes. Among the reasons underlying such projects were the incoherence and fragmentation of university studies, lack of motivation among students and teachers, and unfavourable employment prospects facing students. Usually the reformers wanted to encourage

students to be more active in their studies and accept more responsibility for their own learning. They also wished to avoid teacher-centred teaching methods and to increase student choice. *Teaching methods and working practices* were developed with the aim of motivating students by diversifying lectures through the incorporation of group dialogues or connecting them with everyday life. The *new study modules* were very activity-oriented: the intention was that students would learn by doing. The modules were meant to raise the quality of learning, increase interdisciplinarity and develop students' vocational qualifications. The category *general inquiries* covered student feedback, difficulties of disabled students at university, and prolonged studies. The *training courses offered for university teachers* were designed to prevent prolongation of studies caused by inadequate supervision of theses and help teachers to cope with the changing learning environments, make use of their increasing links and cooperation with their colleagues at national and international level, address the need to create meaningful and productive learning processes, exploit the findings of educational research, and develop their expertise as teachers. (Honkimäki 1997.)

In addition to the findings of the study of developmental experiments, there are two projects that can be mentioned as examples of innovative approaches to reforming teaching and learning at the University of Jyväskylä. They involve the tutoring of first-year students: an experiment with 'home-group' education at the Department of Teacher Education and staff tutoring at the Department of English (Heikkinen & Nikki 1999; Hirvonen 2000). As the developers of these tutoring systems saw it, education was being offered on the principle of take it or leave it; in their opinion, if a department fails to accept the responsibility it has for its students, it is leaving them to their own devices. The experiments were designed to help the students to take possession of their own studies and become self-regulating, to motivate the students, and to introduce the staff and the students to each other. While the prevention of dropping-out is an important goal of such projects for developing tutoring systems, there is always the danger that such activities will mean that students are 'mothered' and controlled in ways more akin to those practised in schools. What actually happened, however, was that the students taking part in home-group studies became quite confused because the dialogue teaching delivered in groups did not offer them the ready-made theories and knowledge to which they had been used at school. Both of these projects achieved,

nevertheless, good results, and the feedback from the students was positive. From the outset of their studies, the students in the home groups appreciated their groups as a means of learning and as a reference group. The feedback on the staff-tutoring system similarly suggested that it was answering student needs.

Discussion

At the turn of the 1980s changes could be observed in university students. A 'new student' with a changed relationship with university was born. As the turn of the 21st century approached, there emerged a new language where terms connected with university studies were replaced with terms belonging to the school environment.

It seems that the talk about university being 'like school' is more than a turn of phrase; it is connected with a changed relationship between work and studying in university students' lives. It is probably also an indication of curricular and interactional problems, in the mass university, between students and university teaching staff. Flawed interaction causes motivational problems, which the projects for developing teaching and learning have been attempting to solve. It is this particular developmental task that the university of our time has taken on. It was absent from the traditional university.

The solutions which have been implemented in the University of Jyväskylä may be approached from an opposite perspective by looking at the solutions as the descriptions of problems. From this perspective the problems in Finnish mass higher education seem to be as follows:

1) Deficiences in resources.

Higher education institutions are lacking resources and the student-teacher ratio is increasing. Therefore, there is a need to develop new teaching materials and students' working methods which encourage thinking and self-directed learning. The methods of distance learning may also be applied in the university studies.

2) Need for evaluation practices.

The use of evaluation as an instrument of developing teaching has been seen important. Therefore, it is important to develop a flexible means of gathering feedback and using it to improve teaching and learning.

3) Need for better educational technology.
The lack of teaching staff has turned attention to the potential of using information technology in teaching. There is a great interest to use educational technology to help both teaching and learning in universities even though the results of the experiments have been problematic.
4) Need to reform degree programmes.
Changes in society, labour markets, students and academic research create continuous pressures to reform degree programmes. Therefore, the reforms of degree programmes are seen as an instrument to decrease the incoherence and fragmentation of university studies and make the degree programmes also more favourable to employment prospects.

It is easy to see that the fragmentation of university studies is one of the most essential things making university resemble school. Research on and development of curricula is the challenge of today, and there have already been responses (Barnett 2000; Karjalainen & Jaakkola 2000). At the level of university departments, developing an entire degree programme requires interaction and co-operation among the teaching staff. Accordingly, teachers' traditionally solitary working practices are changing.

Whenever there are demands for changes in university, it is not unusual to hear regrets at losing something traditional and valuable. It is possible that such pessimistic complaints about the loss of traditional Humboldtian university education and comparisons between it and the allegedly school-like university we have now threatens to dissipate the energy we need to do the work of developing teaching and learning in our universities. When people are expressing a longing for traditional university education, they are talking about a change that has taken place; they are comparing the situation of today to some earlier one. Koski (1990) has, however, examined autobiographies of a number of famous people looking back to their university years and found that none of them were satisfied with their education. It seems that those good old times never existed. Koski suggests that university studies have performed their academic, 'civilising' function in the societal context of the given times rather than in the context of university as an organisation. We must note, however, that if the implication of the Humboldtian ideas about university education is that the acquisition of knowledge should be bound up with the construction and enrichment of the student's own subjectivity, then, as I see it, strengthening students' intrinsic motivation and involvement by pro-

moting personal interaction between students and staff (as in staff tutoring mentioned above) is the best way to follow that old tradition.

References

Aaltonen, K. 1992. Opiskelua ja ansiotyötä. Havaintoja ja tutkimustuloksia korkeakouluopiskelijoiden työssäkäynnistä. (Studying and paid work. Observations on and research findings about working among university students). Helsingin yliopisto. Opintoasiain julkaisuja 6.

Aaltonen, K., Helenius, P. & Riihinen, O. 1997. Mielekkyyttä epävarmuuteen opiskelun ja ansiotyön vuorovaikutuksella (Making an uncertain existence more meaningful: interaction between studying and paid work). Opetusministeriö. Koulutus- ja tiedepolitiikan osaston julkaisusarja 43.

Aittola, T. 1992. Uuden opiskelijatyypin synty (The birth of a new type of student). Jyväskylän yliopisto. Jyväskylä Studies in Education, Psychology and Social Research 91.

Allan, J. 1996. Learning outcomes in higher education. Studies in Higher Education 21, 93–108.

Biggs, J. 1999. Teaching for quality learning at university. What the student does. Buckingham: Society for Research into Higher Education & Open University Press.

Barnett, R. 1992. What effects? What outcomes? In R. Barnett (ed.) Learning to effect. Buckingham: The Society of Research into Higher Education, 3–18.

Barnett, R. 2000. Supercomplexity and the curriculum. Studies in Higher Education 25 (3), 255–265.

Gasch, B. & Wissner, W. 1981. Studentisches Lernen und wissenschaftliche Fächer (Student learning and scientific disciplines). In R. Francke, J. Klüver & W. Rieck (eds.) Krise des Studiums als Krise der Wissenschaften (The crisis of university studies as a crisis of science and scholarship). Hamburg: AHD.S. 75–88.

Heikkinen, H. & Nikki, M.-L. 1999. Opettajaksi kotiryhmässä (Training as a teacher in a home group). In S. Honkimäki (ed.) Opetus, vuorovaikutus ja yliopisto (Teaching, interaction and university). Jyväskylän yliopisto: Koulutuksen tutkimuslaitos, 116–131.

Helenius, B. 1995. Nuoret, työ ja koulutus – selviytymisstrateginen näkökulma (The young, work and education – a survival strategy perspective). Korkeakoulutieto 22 (4), 22–27.

Helenius, B. 1996a. Oman elämänsä räätälit. Raportti epätavanomaisista korkeakouluopiskelijoista pääkaupunkiseudulla. (Tailors of their own life. A report on unconventional university students in the metropolitan region). Opiskelijajärjestöjen tutkimussäätiö Otus rs. Työpapereita, Working Papers 10.

Helenius, B. 1996b. Temppelinvartijasta supermarketin hoitajaksi (From a temple guard to the manager of a supermarket). In B. Helenius, E. Hämäläinen & J. Tuunanen (eds.) Kohti McDonald's-yliopistoa. Näkökulmia suomalaiseen korkeakoulu- ja tiedepolitiikkaan (Towards a McDonald's university. Perspectives on higher education and science policy in Finland). Helsinki: Hanki ja jää, 283–299.

Helenius, P. 1995. Sukkulointia opiskelun ja työelämän välillä. Kauppatieteiden ja humanistisen alan opiskelijat vertailussa (Shuttling between studying and working life. Comparing business administration and humanities students). Opetusministeriö. Korkeakouluneuvoston julkaisuja 1.

Hirvonen, T. 2000. Yksin ja yhdessä (Alone and together). In E. Kallio (ed.) Itsensä näköinen yliopisto-opettaja (Being oneself as a university teacher). Jyväskylän yliopisto: Koulutuksen tutkimuslaitos, 121–128.

Honkimäki, S. 1997. Jyväskylän yliopiston opetuksen kehittämishankkeet. Raportti vuosina 1995–97 rahoitetuista hankkeista. (Projects to develop teaching at the University of Jyväskylä. A report on projects funded in 1995–97). Jyväskylän yliopisto. Koulutuksen tutkimuslaitos. Työpapereita 4.

Karjalainen, A. 1995. Kadottaako koulutus (Does education lose something) [Online]? Oulun yliopisto. Peda-forum. Available: http://www.hallinto.oulu.fi/optsto/pedaforum/aineistot/oppimat/kadk.htm [2001, January 20th].

Karjalainen, A. & Jaakkola, E. 2000. Opetussuunnitelmien kehittäminen (Developing curricula). Korkeakoulutieto 28 (3–4), 37–42.

Koski, L. 1990. Tarinoiden yliopisto tehokkuuden diskurssissa (The university of stories in the discourse of efficiency). Joensuun yliopisto. Kasvatustieteiden tiedekunnan tutkimuksia 28.

KOTA data base 2001. [online] Opetusministeriö. Available: http://www.csc.fi/kota/kota.html

Lempinen, P. 1997. Opiskelijabarometri 1997. Kyselytutkimus korkeakouluopiskelijoiden elinolosuhteista ja asenteista. (Student barometer 1997. A questionnaire survey of university students' living conditions and attitudes. http://www.fsd.uta.fi/english/data/meF1115e.html). Opiskelijajärjestöjen tutkimussäätiö Otus rs. Työpapereita, Working Papers 11.

Lempinen, P. & Tiilikainen, A. 2001. Opiskelijatutkimus 2000 (Student report 2000. http://www.fsd.uta.fi/english/data/meF1115e.html). Opiskelijajärjestöjen tutkimussäätiö Otus rs 21.

Matthies, J. 1988. Kriittisiä huomautuksia yliopistojen "kurrikularisoitumisesta" (Critical comments on the "curricularisation" of universities). Kasvatus 19 (3), 219–224.

Moore, E. 2000. Aikuisten yliopisto-opiskelijoiden monet opiskelupositiot (The many studying positions of adult university students). In S. Honkimäki & H. Jalkanen (eds.) Innovatiivinen yliopisto (An innovative university)? Jyväskylän yliopisto: Koulutuksen tutkimuslaitos, 191–202.

Olesen, H.S. & Jensen, J.H. 1999. Can 'the university' be revived in 'late modernity'? In J.H. Jensen & H.S. Olesen (eds.) Project studies – A late modern university reform? Roskilde: Roskilde University Press.

Pahkinen, T. 2000. Miten yliopisto-opiskelijat oirehtivat (How do university students show symptoms)? In S. Honkimäki & H. Jalkanen (eds.) Innovatiivinen yliopisto (An innovative university)? Jyväskylän yliopisto: Koulutuksen tutkimuslaitos, 102–108.

Parjanen, M. 1998. Opetustaidon arviointi yliopisto-opettajien virantäytössä (Evaluating teaching skills during appointments to university teaching posts). In K. Hämäläinen & S. Moitus (eds.) Laatua korkeakoulutukseen. Teoriaa ja käytäntöä. (Improving the quality of higher education. Theory and practice). Korkeakoulujen arviointineuvoston julkaisuja 6.

Helsinki: Edita, 46–54.

Poikela, S. 1998. Ongelmaperustainen oppiminen. Uusi tapa oppia ja opettaa? (Problem-centred learning. A new way to learn and teach)? Tampereen yliopiston opettajankoulutuslaitos. Hämeenlinna. Ammattikasvatussarja 19.

Purhonen, A. 1995. "... ei tässä uskalla ottaa opintolainaa, kireetä on muutenkin": Opiskelijoiden tulonlähteet, taloudellinen selviytyminen ja opintolainan käyttö osana toimeentuloa. ('... you don't dare raise a study loan, things are hard enough as it is': students' sources of income, economic survival and use of the study loan as a part of their living). Stakes, Aiheita 7.

Silvonen, J. 1996. Nopeammin, nopeammin... Opiskelu ja korkeakoulupolitiikka (Faster, faster ... studying and higher education policy). In B. Helenius, E. Hämäläinen & J. Tuunanen (eds.) Kohti McDonald's-yliopistoa. Näkökulmia suomalaiseen korkeakoulu- ja tiedepolitiikkaan. (Towards a McDonald's university. Perspectives on higher education and science policy in Finland). Helsinki: Hanki ja jää, 73–118.

Suomen tilastollinen vuosikirja 1985/86. 1986.Statistical yearbook of Finland 1985/86. Tilastokeskus. Central Statistical Office of Finland. Helsinki: Valtion painatuskeskus.

Suomen tilastollinen vuosikirja 2000. 2000. Statistical yearbook of Finland 2000. Tilastokeskus. Central Statistical Office of Finland. Keuruu: Otavan kirjapaino.

Tynjälä, P. 1999. Towards expert knowledge? A comparison between constructivist and a traditional learning environment in university. International Educational Research 31 (5), 355–442.

Tynjälä, P., Nuutinen, A., Eteläpelto, A., Kirjonen, J. & Remes, P. 1997. The acquisition of professional expertise – A challenge for educational research. Scandinavian Journal of Educational Research 41, 475–494.

Vesikansa, S., Lempinen, P. & Suomela, S. 1998. Tehokkaaseen opiskeluun – norminopeutta vai mielekästä oppimista (Towards effective studying – target speed or meaningful studying). Opiskelijajärjestöjen tutkimussäätiö Otus rs 14.

Chapter 6

HELENA AITTOLA

Academic Life and the Pressure of Massification

Introduction

In the last few decades universities have felt hard pressures both inside the higher education system itself and from the larger society. University as an institution is not a separate island in society. Many previous descriptions and metaphors which stressed the untouchability of university are not valid anymore. The role and function of university in contributing to national well-being and development is widely accepted. (Bleiklie, Hostaker & Vabo 2000; Sporn 1999.) This is not enough, however, because the international context where education is delivered today puts additional strains on national higher education systems. Universities all over the world are more and more interconnected as they become involved in international cooperation and competition. Nowadays efficiency and quality are the most compelling guidelines steering the operations of the university system. These trends will raise questions as to what kind of consequences the massification and globalisation processes underway in higher education have for the basic functions of universities and especially for academic life.

The aim of this article is to describe and analyse academic life in general and some features of the doctoral training system in Finland in particular. Now that systems of doctoral training are being reformed in many countries, training doctors has become a primary consideration in higher education policy, and Finland is no exception. The national perspective of this study will be broadened by considering observations made in an international research context.

Higher Education in Transition

The point of departure of this study is the variety of the change processes which have taken place in the Finnish higher education system in recent decades. These processes will not be examined here in detail, but I shall discuss some main changes which, it has been argued, affect every level of the system. At the level of the university institution, the ideology of management by results has become the leading principle shaping Finnish higher education policy (see chapter 2 in this book). Management by results implies that the members of an academic community, from the top administrators to the individual student, should constantly reflect on the products and results of their activities. Moreover, the products must be defined so that they can be assessed in academic terms and measured in administrative terms. The goal is to make the products of academic activities in every university and in every discipline and field of study somehow commensurable.

Research and the production of knowledge are the core functions of university. Today, as the gains of research have become an issue in discussions about efficiency, boundaries of pure and applied research have become more blurred and the definition of their relative status less easy. (Bauman 2001; Gibbons et al. 1994.) Additionally, alterations in the structures of research funding in Finland challenge existing modes of knowledge production. As a result, ways of organising research are changing, and research can not longer be talked about merely as a private affair of an academic. Overall, university-based research is now more dependent on external funding than some five or ten years ago. During the same period, the proportion in research financing of money from the state budget has been shrinking.(KOTA data base.)

As in many other countries, the number of students in higher education is rising all the time in Finland (KOTA data base). The teaching load is becoming heavier as the number of students per a member of the teaching staff is continuously rising, possibly not in every university department but certainly in some prominent disciplines. Teaching resources have not been proportional to the rising enrolments. At the level of departments, the growing number of students and the need for efficiency have made it necessary to find new ways to arrange teaching and learning processes. Academics are daily having to cope with conflicting responsibilities as teachers and researchers, which makes working at university demanding and stressful.

All these changes and reforms have profoundly affected the working conditions and academic experiences of individual members of academic staff. Inevitably they may impinge also upon discipline-based academic identities in many ways (Henkel 2000).

Doctoral Training in Transition

The deficiencies in the doctoral education system and a lack of doctors in some certain areas of society provided the main impetus for a reform process in Finland which resulted in the establishment, in the early 1990s, of a new institution, graduate schools. The ineffectiveness and shortcomings of Finnish doctoral training was demonstrated in many national and international assessments. The comparative studies indicated that the whole national research system needed to be reorganised to make it more effective. In fact, it is somewhat misleading to call the previous practices researcher training because doctoral degrees have mostly been based on independent research by those wishing to take a doctorate. This was true especially in the humanities and the social sciences. There was a serious shortage of full-time researcher training posts which would have enabled some number of doctoral candidates to concentrate on their research. Thus, the most serious obstacles on the road to a doctorate were financial. Other complaints were focused on the lack of research teams and insufficient supervision of doctoral studies. Doctoral candidates have found it difficult not only to commit themselves to research but also to find research communities relevant to their interests, which would do much to foster a doctoral study process. (Aittola 1995; Laiho 1997.)

The median age at which postgraduate students gain their doctorates is used as one indication of the effectiveness of a researcher training system. In Finland the median age for PhDs has since the mid-1980s been about 36 years. It has been argued that completing a doctoral degree at an earlier stage of one's career would substantially benefit the individuals concerned and that it would also be in the public interest.

The aim of the graduate school reform carried through in 1994/95 was to reorganise doctoral education in every discipline and field of study with a view to making it more efficient and up to date. In many research fields graduate schools form multidisciplinary network organisations which are intended to improve the provision and quality of researcher training. In the first place, the

graduate schools offer doctoral students a large number of full-time scholarships and researcher training posts. Typically, they deliver study programmes based on a prearranged schedule and consisting of national and international courses and seminars. Today a good many doctoral students are admitted to research teams and receive specialised and adequate supervision as members of graduate schools. (Aittola & Määttä 1998; chapter 7 in this book.) All these arrangements will probably contribute towards a shortening of the postgraduate study process and, above all, a high quality of research and a high standard of doctoral theses.

Fields of Social Action

As educational reforms always have many intended consequences, there may also be unpredictable effects. Some of them can be rational at the system level but have harmful results at the level of an individual. It is possible to separate these levels conceptually, but Ivar Bleiklie and others (2000) have preferred to use the concept of 'fields of social action' instead of distinguishing between various levels. They define a field as "an institutionalized area of activity where actors struggle about something that is of importance to them" (15-16). They see institutions and human agency as inseparable from each other. This inseparability must be taken into account in an analysis of an actor-context model of change.

This study focuses on individual behaviour and experiences. Furthermore, doctors and doctoral education are at the centre of attention because of their significance for academe and for society. A doctoral thesis is a widely recognised mark of a person's academic competency. It is the ticket one needs if one wants to be admitted as a qualified member of an academic community (Bleiklie et al. 2000). Sometimes the road to a doctorate is a smooth one, but postgraduate students face many obstacles and gatekeepers on their journey to a doctoral degree. The basic structures of the higher education system may be changing, as usually happens at times of reform. The significant relationships within university may be altering as a result of appointments regulations and financial decisions. In consequence, doctoral candidates construct their academic identities under a variety of pressures and under the influence of a range of ambiguities.

The social status conferred by a doctoral degree is not as stable or indisputable as it used to be some decades ago. Now that the value of higher education is generally assessed in terms of its social relevance, the esteem accorded to a doctorate is also more dependent on the benefits that employers and society derive from the degree (Välimaa 1998). All in all, the significance that a doctoral degree has for an individual may vary both from one phase of their career to another and over the course of their entire life. A doctoral degree is an essential requirement for a researcher hoping to launch an academic career. Besides, it may be an additional merit in some careers outside university. It is assumed in this study that doctoral candidates and doctors occupy a critical position in academic life, which allows them to observe academic life and changes in it across a broad spectrum of phenomena.

In the following chapters I shall describe, from the point of view of holders of doctorates, some of the current trends in academic life in Finland. Basically, it is a question of how doctors, given this changing situation, can carry out their tasks in their particular field of social action. The study will give some answers to a number of questions. First, what is it like to be an academic in a mass university and to conduct research, teach and perform administrative tasks under the present conditions? Secondly, what has it been like to become a member of an academic community through doctoral education in recent decades, and, thirdly, what has the doctorate personally meant to the doctors interviewed for this study and how has it affected their career? Obviously, the central ideals of university and of different disciplinary cultures have varied greatly in the decades during which the interviewees pursued their doctoral studies and conducted the research on which their dissertations are based. Moreover, the structures and processes of higher education have altered in response to prevailing higher education policies, financial regulations, qualification structures and degree programmes. The answers to the above questions will shed light on some aspects of the mass university and on the prospects of constructing an academic identity in a mass university.

Data and Method of the Study

The empirical data of this study are derived from interviews with a sample of doctors. A variety of disciplines and fields of study were covered: there were doctors representing both pure and applied science as to the aims and hard

and soft science as to the methods of research (Becher 1989). In terms of Becher's classification of scientific cultures, there were people from pure and hard science (physics, chemistry), pure and soft science (history, English philology), applied and hard science (statistics, information technology, psychology) and applied and soft science (education, special education, social policy, health science).

The sample consists of 6 women and 6 men. Their age varies from 30 to 55 years. These twelve doctors had taken their first degree (in Finland a MA) and defended their doctoral dissertation in different decades extending from the 1970s to the year 2001. Obviously, these doctors may belong to different generations as defined by their age and their experiences of university life (Mannheim 1952). It was assumed that the interviews would reflect the changes that have occurred in university life and doctoral studies and, on the other hand, that there would be some generational differences in the doctors' perceptions of the main interview themes.

The interviews were loosely semi-structured, concentrating on the following subjects: university as an institution and changes in higher education policy, the interviewees' own university and discipline or field of study, doctoral training and study processes, and the significance of a doctoral degree. In addition, there were some questions about the doctors' life history, life situation and future orientations. Nevertheless, it was the doctors' experiences of university life, their doctoral education process and the significance of a doctorate in their lives that were brought into focus in this study.

The doctors responded favourably to a request to take part in this study, finding it very interesting to be interviewed. The interviews were conducted by the researcher herself in spring 2001. The doctors were asked to describe freely their own experiences of, assessments of and opinions about the interview themes. The fact that the researcher was herself a doctor who had gone through the same doctoral training process as the interviewees made for relaxed discussions. In this regard, sharing a similar background generated a common universe of discourse (Atkinson 1998). Nor did the fact that the doctors represented different disciplines impede the generation of mutual understanding. They talked without restraint, all the interviews went off smoothly. The interviews took between 45 minutes and two hours, depending on the variety of experiences and the way in which each doctor was accustomed to express themselves. Most of the interviews lasted an hour.

As the interviews covered among other things the doctors' past and present life and future prospects, it is possible to consider the data as narratives of their lives (Atkinson 1998). It is not, however, the intention here to analyse the interviews as narratives; instead, attention will be confined to certain specific aspects of academic life as seen by the doctors. For the purposes of this article, the structural unity of the interviews is broken up. A temporal dimension is naturally present in the interviews since the doctors belong to different generations. All in all, it may be said that the interviewees looked at the reforms and transitions of academic life through generational lenses.

The doctors' assessments of university as an institution varied, understandably, according to their experiences of university life in different decades. Moreover, they expressed their judgments from the vantage point of their current positions in the academic field and within the academic hierarchy (Bourdieu 1988). It is self-evident that the prevailing state of affairs in university and their personal live situations also affected the doctors' perceptions.

Naturally, the older doctors have a broader perspective on changes in university than the doctors from younger generations. Some of the older doctors have lived through the 1970s, a politically active decade in university life, since when university reforms have profoundly changed the structures of university as an institution (see chapter 2 in this book). The younger doctors' experiences are limited to the latest decade; for them the present university is 'the only truth'. One of the basic differences between the generations was their attitude towards the ideal of university. The representatives of the older doctoral generations considered its autonomy and independence a fundamental principle, whereas the younger doctors were more responsive to influences from the outside world. In spite of the differences in the doctors' perceptions, they all tend, in their narratives, to range backwards and forwards across the years they had spent in academe (Crob, Krings & Bangerter 2001). Their assessments of university life alter as their own status changes; as one professor pertinently put it:

> When you are in the role of a student you look at things differently, you don't see beyond your own department. When you have these (lecturer's/professor's) duties, it's such a different angle. You must see things from the perspective of your own discipline, not only within your own university and nationally but internationally too. And then in administrative positions you must pay more attention to what can be quite conflicting interests within the university and from the larger society ... even if I do talk a little,

> like, negatively about administration, I must admit that without those vantage points you might act, like, narrowly in many things. Those tasks are important too in the sense that you begin to see what the policies are about. Those tasks are good vantage points, that's undeniable.

The following chapters will illustrate the characteristics of university life from the doctors' perspective. Additionally, the findings will be discussed in more theoretical terms by being considered in the context of the idea of a mass university.

Changing Everyday Life in Academe

New Trends in University

Many of the doctors described today's university as 'a production plant'. In the opinion of older doctors, the Humboldtian idea of university has lost its vitality under the pressure of productivity-oriented thinking and in a climate of efficiency. As a result of the operations of universities being increasingly controlled by the central administration, university autonomy has become a dead letter. As one professor said:

> ... when they set those (productivity) indicators, it's those indicators that control the operations (of the university) all the same.

The doctors felt that the atmosphere at university has become more strained and that there is less freedom and less room for individual ways of thinking and acting.

Producing new knowledge and training students are still the basic functions of university. A high quality of academic work is taken for granted. It is not, however, easy to define the quality of research or teaching unambiguously. In fact, it has been argued that the operations of university must generate measurable products. These may be degrees, publications, mentions in citation indexes, research grants, having centres of excellence, or anything else worth gauging and ranking. The main reason why people and units are being ranked is the shortage of resources and the resulting keen competition for them. This affects the everyday life of university staff. Talking about what he saw as a bad situation at university, one older professor observed:

> It's this financial aspect of things, budget cuts, you know ... then this Humboldtian idea of university as a civilising institution, it's being tramped underfoot a little. Replaced by this rushing about after money.

Many doctors maintained that management by results has been parallelled by the introduction of increasingly bureaucratic practices. Academic staff are obliged to adjust to all kinds of administrative tensions within universities. The doctors complained about the growing burden of administrative and routine work, such as sitting on committees, writing reports of various kinds, preparing applications for research grants and so on, which are keeping them from attending to more relevant academic duties. The idea of the autonomy of academic work has been narrowed down, giving way to short-term responses to demands from administration for information on one's current and planned activities as a teacher and a researcher. As a professor saw it:

> I really have this feeling that administrative duties are robbing me of my time. Many administrative and routine tasks are taking up all my attention and preventing me from concentrating on research and teaching within my own discipline.

The doctors used descriptive metaphors to characterise today's university. According to them, it has been typical of the university of the 1990s that "the pace has accelerated" and "people are facing the turbulence of university life". The members of an academic community have to keep up not only with the changing rhythms of economic and administrative conditions but also with the demands of science and scholarship (Bleiklie et al. 2000). The tensions emanating from within and outside university have trapped staff and students in 'a production and assessment process' where resources and products are constantly evaluated.

The State of University-Based Research

The state of research in a university is the basic standard for assessing it. As one university lecturer put it:

> They are so single-minded about results, it's research, completed degrees and then all those calculable things that they have invested in and they have also evaluated and valued them. Getting resources depends on those (things). Teaching is pretty invisible,

> its quality, and many times its effects are seen much later, they are difficult to monitor. Even though the number of completed degrees is linked with the quality of teaching.

This reflects the habit, which surfaces whenever academic staff are discussing the main functions of university and different aspects of academic identity, of seeing the demands of research and teaching as conflicting (Henkel 2000). From a scientist's or a scholar's point of view, it is only rational to give priority to research because productive research activities are the main criterion determining appointment and promotion in the course of a university career. In this study, the doctors knew very well that although teaching portfolios are being introduced, the amount and quality of the research done by the applicants are still the decisive criteria when vacancies are being filled.

As many indicators show, research is not solely the private affair of an academic. Cooperation between departments is nowadays nearly an obligatory goal. Departments cannot devote themselves only to their own affairs; instead, they must find their strengths and identify areas of development shared with other parts of their university. As a result, the boundaries separating disciplines are becoming blurred and joint research projects are being organised. The doctors interviewed for this study value activities which would make it easier to set up multidisciplinary research projects. In addition, large research programmes are launched in different fields of research to enhance the gains of synergy and to ensure continued research funding. In this study, some doctors argued that research policy of this kind is revealing visible drawbacks:

> Today you are increasingly often forced to adjust your own research proposals to the research programmes and research projects of the Academy of Finland and the like. If you want to get money for your projects that is.

Especially doctors in the humanities wondered who would see to it that there is variety and diversity within each discipline when funding is focused on certain main areas of research, especially on 'the fields in vogue'. Moreover, researchers' independence and freedom of action will diminish as the agenda, results and deadlines of joint projects come to affect every researcher regardless of their position in a research team. A senior researcher pointed out that

> yes, in practice university people must write research applications all the time – and proposals, and report on the results of their studies and on their plans. That takes a lot, more and more time and energy. You must always be on your guard against being left out of some research programme.

The significance of research is indicated by the amount of research funding made available, and the number of researchers continues to rise. Particularly laboratory research is very labour-intensive. One professor emphasised the role of postgraduate students:

> Actually, they do play a big role. It's particularly marked in experimental physics where the laboratory wouldn't be running without them.

This exemplifies the interdependence of research, teaching and study processes in certain research fields. In general, it is asserted that in Finland the natural sciences need and are given more resources for research than the social sciences or the humanities. One professor underlined that

> ... all those (productivity targets) have been set according to the natural sciences. That's where external funding is so much easier to come by too.

The State of University Teaching

The traditional ideal of university life embraces freedom of research, teaching and studying. It has been argued that some decades ago, teaching at university used to be mainly a private affair of the academic staff, while in the mass university responsibility for teaching is discussed more widely. There have always been individual academics at university who have valued teaching and who have been willing to unselfishly invest their time and energy in teaching. In this study, one professor took pride in having received an excellent teacher's award three times, whereas some of the doctors saw teaching as an unavoidable chore and as something not really linked with other academic activities. In Finland, academic staff are not required to take courses in university teaching and training in order to qualify for a university post.

At present, growing student numbers create pressures within university to make teaching more effective. The current trend is towards producing more degrees more economically and more quickly. The quality of teaching must

not to be forgotten either in this production process. Academic staff have tried to solve this equation by enhancing teaching methods and by improving both supervision and evaluation systems. As one professor said:

> These days university teachers are becoming truly and sincerely interested in attending to their teaching and developing it. And also in the students' learning.

And on the other hand, as a professor of teacher education pointed out,

> today we are also being asked for more. The students are more apt to ask and have more courage to ask, and to demand better instruction and supervision.

The rise in student numbers is parallelled by an increasing heterogeneity of the student population, which has further increased the pressure to reorganise the teaching and learning contexts.

In some university departments, budget cuts have seriously hampered teaching provision. It is not possible to arrange enough contact training, and student groups are left to find out their learning tasks on their own. As doctoral training is a priority at university, sometimes academic staff pay minimal attention to students working towards their first degree. Budget cuts have also made the working conditions of university teachers very insecure. Some teachers said that they would be very keen to develop their teaching skills and work practices but

> ... there's this awfully frustrating situation that you are forced to think, if I'm here one year does it pay to (invest in teaching activities) and then (when I'll leave) I would in as sense be forced to give it up.

For all that, the doctors who took part in the study are increasingly aware of the status and relevance of teaching at university. There is no doubt that in the near future, teaching productivity and merits will feature more largely in the process of ranking universities and university departments, as has already happened in the selection of centres of teaching excellence in Finland.

Relations Between University and Society and Business

It was noted at the beginning of this article that university is not a separate island in society. In Finland the main function of university has traditionally

been the production of knowledge and the preparation of a labour force intended to serve the state and the Church, but university's legal autonomy has enabled it to fulfil its function quite independently. Nowadays, both in the public and in the private sector there is great demand for well-educated, professionally qualified people to perform different jobs. Therefore, "I expect there'll be more of this professionally oriented stuff", as especially the younger doctors interviewed for this study emphasised. One professor admitted that "Students preparing for professional practice, we're going to pay more attention to their needs in our instruction. This is a general trend at university now, after all. It will certainly affect educational contents in one way or another ". Contacts with different workplaces are easily established in those study fields where the basic degree programme includes a compulsory practical training period. Moreover, many students are willing to prepare their master's thesis in collaboration with companies and industry. In some disciplines there are plans to adapt specific curriculum contents and training arrangements to the changing needs of working life.

The financial problems facing universities have made it necessary to look for extra funding from different outside sources. Today, especially research funding has become very much dependent on external funding sources. One older professor observed that

> Now when you must be after money all the time, publicity and visibility have become important. Sometimes you feel that it is considered the most important principle behind the operations of university these days.

University staff must intensify their efforts to convince outside people of the value of research and research results. In this regard the leaders of research teams are in a key position. The visibility principle implies another tendency which one doctor described as follows:

> These days every university must project an optimally positive image of itself so that you'll do well in international competition.

In general, the doctors regarded these aspects of visibility with some suspicion. They explained that the prospects that different scientific disciplines have of finding external funding are not equal and that it is the research fields most successful in terms of productivity that attract money and people. In

Finland, some recent studies have demonstrated that the centres of excellence are accumulating research resources that fund a small number of institutions based in the metropolitan area. "It's the centres of excellence that amass most of the resources", was one professor's somewhat bitter summing-up.

It can be argued that some features of the business sector and of the ideology of market forces have entered university life. The normal practices of university are challenged by those forces, implying negotiations and new contracts with business. It is not surprising that some of the older doctors were bewildered by the novelty of such activities. The issue is twofold: how can university retain its autonomy under these circumstances, and are market forces by their very nature a threat to the basic functions of university?

University in an International Context

Nowadays it is taken for granted that research, science and scholarship are international activities. National universities cannot isolate themselves from the international scene because the production, reproduction and accumulation of knowledge go beyond both the boundaries of countries and the limits of disciplines (Castells 1996). It is at the core of scientific work to collaborate around the world. Even so, the nature and state of a specific discipline may delay the emergence of international cooperation, as was pointed out by one lecturer:

> Yes, (internationalisation) is there all the time here (in our field) but I think there should be still more of it, concretely. Obstacles? Just now at least you feel that it's money, quite concretely. (Though you can ask) if there's also a lack of skills in a young discipline to create these networks and look for them. And you have this feeling that some have more and some have less. It's really a huge lot of work that's needed.

Thus, the importance of competing in the international scientific markets varies among different disciplines.

The narratives of the doctors who took part in this study painted a precise picture of the value of and demands involved in becoming international. The modes of international contact vary greatly. In Finland international exchange programmes for students and teachers did not become common until in the late 1980s. It was typical for younger generations of doctors to study abroad

and visit (inter)national research centres for shorter or longer periods during their basic university or doctoral studies. Older doctors' experiences of international contacts during their doctoral studies had normally been restricted to international seminars and conferences. Only some two decades ago it was quite out of the ordinary to conduct research abroad as a part of one's basic studies, and it was recommended that students postpone international research work until the postdoctoral phase of their scientific career.

There are obstacles in the way of becoming more international. The doctors mentioned a lack of money and time as the main restricting factors in academic everyday life. It is very time-consuming to initiate research collaboration and negotiate partnership contracts with international partners. One lecturer said:

> In the final analysis the concrete benefits aren't necessarily all that striking if you have joint projects. But we have many kinds, teacher and student exchange, developing virtual education. You feel that it's money going to waste, time going to waste. If you see just what we got done together, it's not very much. You must say that it's damned (frustrating), you work hard and long and the results don't amount to much.

In addition, a leader of a multicultural project complained that

> those multidisciplinary projects are very much and multicultural projects difficult in the sense that it takes long before you begin to collaborate in earnest. It's this creation of a shared action culture, it seems to take a huge amount of time. Yes, there's always something that puts you to thinking, is this how one operates here after all. An awful lot of those things ... I expect it's the bureaucracy in every country that's the biggest problem, prevents this (collaboration).

The respondents' experiences suggest that international cooperation has many promising aspects. For all that, some doctors argued that

> these days there's such a strong emphasis on internationalism in everything, in research, teaching and studying ... The benefits can sometimes be pretty small compared to the resources and investments it required.

BEST COPY AVAILABLE

The Doctoral Study Process and the Benefits of the Doctorate

The following chapters will focus on the doctoral study process and the significance of a doctorate in the context of Finnish higher education. The findings are based on the interviewed doctors' experiences from and perceptions of doctoral studies, and the significance of a doctorate is considered from their point of view.

Changes in the Doctoral Study Process and the Doctoral Thesis

The problems with doctoral training in Finland mentioned earlier in this article and the need for doctors in areas of society considered important from the perspective of national development and international competitiveness led to reforms of the training system in the early 1990s. Most of the doctors who took part in this study can be, however, characterised as 'products' of the previous doctoral training practices; few have gone through the new graduate school system. Nevertheless, all the doctors were aware of the idea of the graduate school and of the training arrangements associated with it and could make some kind of assessment of their own experiences against the aims of the reform.

Year after year, the main problems with the doctoral study process have remained unchanged: a lack of funding, deficiencies in training and supervision arrangements, the scarcity of research teams, the participants' feelings of loneliness during their doctoral studies and so on, which have made doctoral studies a vexatious time and caused distress to generations of doctoral students. The impacts of these problems have varied to some degree in different decades according to the prevailing science and funding policy, but at an individual level the outcome has always been the same: the prolongation of one's doctoral studies.

Most of the doctors interviewed for this study suffered from a lack of research funding in some phases of their doctoral studies. Grants for shorter or longer periods had ensured them time and money for their research, but usually it had been rather difficult to prepare a doctoral thesis when employed outside a university. Even those who had held a post in a university depart-

ment had found carrying out a doctoral research project quite a complicated business. Those doctoral students who had had a full-time researcher or researcher training post had been best able to immerse themselves in research. In fact, it is somewhat erroneous to call such researchers 'doctoral students' because they had been themselves fully responsible for their own research projects. A senior researcher explained:

> I wrote a licentiate's dissertation (in one research project), got money for research from the Ministry of Labour (for another study), in a sense wrote two reports. It was those two reports that I then turned into a doctoral thesis. Let's say, it emerged, like, as a by-product.

In the 1980s it was already being taken for granted that when one is holding a fixed-term researcher post from the Academy of Finland, one's doctoral degree should be completed during the term of one's post.

Nowadays, a more generous funding policy and improved training arrangements in graduate schools are making the process substantially smoother. In principle, as one younger doctor affirmed,

> I could work in peace all that time, there wasn't any need to do anything else. That's the aim of a graduate school, you have a what you could call a stable place where there aren't too many jobs on the side.

However, the norm of a four-year study period for the completion of one's doctoral studies has not come true for all full-time doctoral students in the initial phase of the graduate school system. It will take more time to establish the system fully (Määttä, Valkonen & Aittola 2001).

Doctoral studies are usually defined as being based on individual studying and research. It is an individual doctoral student who prepares their doctoral thesis and is responsible for finishing it. "I prepared my doctoral thesis all alone", was a typical comment from the older doctors. True, they had attended postgraduate seminars more or less regularly, but in their opinion the gains had been quite modest.

In the natural sciences, research teams have been fairly common; in these fields research is conducted along more cooperative lines than in the social sciences or the humanities. In principle, in the natural sciences doctoral students can discuss problematic situations with and receive advice from senior

129

researchers working in the same research team (Delamont, Parry & Atkinson 1997). In this study, some doctors representing the natural sciences were aware of the advantages of research teams but had themselves been unable to fully benefit from teamwork. As one younger doctor said,

> Yes, I was in a team. At the point when I was taking the first steps (towards my doctorate) we were seven people. That was a pretty big crowd. Then it just got smaller and finally I was the only woman there. Then more people left so that there I was doing (my thesis) alone with the professor. We did have a shared subject but everyone had this small field of their own. In that sense it was a bit of a failure too ... When everyone starts examining that subject around their own navel, they forgot (the team). On the other hand, the department didn't give it any support either. I do think that the department should have made some kind of commitment too. It would have been a good team. The potential was there.

For some of the social scientists interviewed for this study, the lack of peers and very limited opportunities to discuss their research with specialists made their doctoral study process uncertain and problematic in scientific terms; feelings of loneliness have been a normal result of studying without contact with other doctoral students. And if the worst comes to the worst, the outcome may be as described by one doctor:

> In a sense I completed it all on my own. It's just that it brought its own punishment, the mark was what it was because I had done it all on my own. A "slave" would have gotten good marks. If you do (your thesis) for another person they would understand it fully. ... I expect it's a tight scale. Maybe they couldn't grasp the overall meaning.

The doctors had, however, informal groups of peers which could to a degree compensate for these problems. Accordingly, it is an open question whether research teams could be a true remedy for isolated research projects and the concomitant feelings of loneliness in all fields of research, as those arguing for joint research projects have asserted. Furthermore, there are disciplines where it is, in the first place, impossible to divide research problems logically into separate projects.

Doctoral studies proceed through a number of different phases. Many doctors emphasised the process of writing one's thesis. It is usually the most time-consuming and challenging aspect of one's doctoral studies. Writing papers about one's research and presenting them in seminars is a demanding and

sometimes a somewhat daunting task for beginning doctoral students, but receiving feedback and suggestions about revision are crucial both in preparing research proposals and later in writing the first drafts of one's research report. As the interviewed doctors saw it, their supervisors could help them best by reading and commenting on their texts at different phases of their doctoral studies. One doctor said:

> I thought it was important and a good thing that my supervisor said that I could give him texts to read any time. And he was quick to give constructive feedback on my pieces, too. After that you felt more confident again and could go on with the job.

Such help is really needed when a doctoral candidate is polishing the final draft, because in Finland all doctoral theses must be published.

When the older doctors who took part in this study started their doctoral studies, it was by no means an established practice in Finland to have a supervisor appointed by the department. Systems of supervision have greatly changed since those years. As a result, the responsibility for the successful completion of doctoral studies is to a degree shared between the student and the supervisor. According to the respondents, however, the regulations concerning supervision cannot ensure the most vitally important aspects of a successful supervisory relationship, that is expertise, encouragement, a sense of mutual trust and respect. This is vividly depicted in statements such as these:

> My supervisor wasn't too concerned with the details of my texts. He never revised my sentences as such. He offered me some new viewpoints. He familiarised me with that way of thinking by offering them as sources. He might, that's the kind of things that stuck in my mind, he might ask about some arguments, ask why. So I explained and he looked at me and said, why don't you write it down here. He helped with the metatext.

> Let's put it like this, (his) expertise in this kind of research that I was doing was of a very high level, and so was the way he encouraged me. They have had a long tradition in that kind of research here. There was encouragement. It was permissive, that supervision. It was permissive and tolerant.

Some doctors had had very miserable experiences from their supervisors and their supervision methods. One doctor complained that

> there was this appointment process at the department just then and somehow what happened was that there were a number of conflicts and problems at the workplace. Somehow the way it affected me was that I couldn't go on with the thesis, there were many things that began to go against the grain for me. You had this feeling that it wasn't worth it in psychological terms, I had already exhausted myself and the departments. I said, if it's like this, humanly speaking it's not worth doing in the first place. That's how hard it was.

At present, in order to guarantee a supervisor's expertise in the student's field of research and avoid disappointments, there are plans to choose supervisors on a more rational basis and to negotiate with the doctoral students about the best possible supervisor.

The doctors' experiences of the problems involved in the doctoral study process can be evaluated by contrasting these with their expectations concerning doctoral studies at the outset of the process. These aspects of doctoral education are considered in the following chapter which assesses the significance of the doctorate.

The Personal and Social Significance of a Doctoral Degree

One of the basic ideas behind the graduate school reform was responding to the need of new doctors in certain research fields. Consequently, because of present or anticipated lack of highly educated labour, the allocation of funds for doctoral training has been strongly biased towards certain areas. It can be argued that the reform was partly motivated by labour issues. On the other hand, the employment status and prospects of holders of doctorates remain a burning issue in Finnish higher education policy (Välimaa 1998).

Most of the doctors had definite views on the question of doctoral employment. Even so, in the beginning of their own doctoral studies it was a quite inessential consideration, especially for the older doctors. Some of them described doctoral studies as "a scientific challenge", and might elaborate "... primarily, I was simply interested in research". They observed that gaining a doctorate demands first and foremost self-discipline and a determination to get the work done. It can be argued that the older doctors were motivated more by an intrinsic fascination with scientific work than by the instrumental values associated with a doctoral degree. One senior lecturer said:

> If I now think back, I never was, it never was my aim to make the highest academic grade. Or to apply for a professorship. Good gracious if someone had said that 20 years ago. It wasn't a part of my world.

One senior researcher, again, asserted:

> There were no carrots there, (the idea of) bigger a salary or even social status or anything like that. It hasn't meant anything to me at least in that way.

For all that, a doctor's aspirations may change when they are caught in the strict ranking system of academic staff. Nowadays there is no escaping the pursuit of a doctoral degree and publications, especially in fixed-term researcher posts, as a means of gaining a more secure position in university. As one doctor said: "I think that the idea just now is that the thesis is a researcher's basic degree." Thus, a doctoral degree is a mark of one's professional capacity to conduct independent research.

According to the interviewees, some time must lapse before one is able to judge what one has achieved through a doctorate. The doctors link its value both to intrinsic and extrinsic factors of academic life. Some doctors stressed the expertise-related aspects.

> Above all, the value of my doctoral thesis is based on its scientific merits, my methodological elaborations are acknowledged because there are not many specialists in my field of research in Finland.

> To me, the most valuable thing about doctoral studies was the improvement in my capacity to solve problems and in my attitude towards the scientific and practical problems in hand.

One professor recognised the scientific significance of the doctoral thesis, but she did have some reservations:

> ... (you mean) in terms of finding my way into my discipline? There's more than one way to see that. Speaking of myself personally, as basic scientific training it was less important than could have been. Maybe if there'd been more of this kind of finding your way into your discipline and if there had been decent supervision I would have benefited more. But pragmatically and from the point of view of becoming a member of the university community, of course it's a ticket of admission.

It takes time to acquire and absorb the specific 'tacit knowledge' (Gerholm 1990) operating in a university department and to be accepted into an academic community.

Although the value of a doctoral degree is obvious in academic life, the interviewees consider its value in the larger society somewhat ambiguous. At present, doctors are less respected outside of university than they were some decades ago. The diminishing value of the degree can be traced to various professional and cultural factors. It has been asserted that as yet in Finland, few workplaces and sectors of society really need doctors. As a result, doctors have had limited opportunities to make their mark in society (Kivinen, Lehti & Metsä-Tokila 1997; Välimaa 1998). "Now that universities will produce a thousand new doctors a year, the value of the degree will absolutely go down", was the opinion of many of the doctors. They assumed that this problem will affect new generations of doctors very deeply. Culturally speaking, as some of the interviewees pointed out, doctors do not form an elite or an intellectual class in Finland. They argued that in general, doctors are not acting as a politically or culturally influential group in Finnish society. This finding is in line with previous research results (Rahkonen 1992).

Conclusions

This article has discussed some aspects of academic life relevant within the framework of the idea of mass university. The observations of this study reflect the effects of the reforms of the Finnish higher education system and of shifts in Finnish higher education policy that have taken place in the last few decades. The aim of the study is to describe and analyse the shifts and changes in academic life from the point of view of the doctors who served as informants. Their perceptions of university in different decades are assumed to reflect generationally experienced changes in academic life. University was assessed through generational lenses, although the doctors did not represent generations strictly in Mannheim's sense (Virtanen 2001). The following sections offer a more in-depth discussion of the main issues of this study: the various aspects of an academic identity, the reform of doctoral training, and the ranking of disciplines. Finally all this is projected against what may be called the basic problem, the ideal of university.

1. The doctors' assessments vary according to many factors: their age, experiences of university life, career stage and position in the academic hierarchy and so on. More important than their actual position was, however, their own self-definition of their current position. They did not necessarily spell it out, but it was possible to deduce it from an interview as a whole and from their attitude towards their tasks.

The basic distinction among the doctors' perceptions of university life depended on whether they felt and defined themselves primarily as researchers or as university teachers. Nowadays it seems to be somewhat difficult to find a balance between these traditionally accepted aspects of an academic profession. The growing number of students and limited financial resources are the most obvious indications of a mass university affecting the everyday life of academic staff. Pressures for increased productivity both in teaching and in research activities are making academic work very taxing. In addition, these demands for greater efficiency go hand in hand with the use of assessment and control instruments. According to the interviewed doctors, administrative practices mean more bureaucracy, haste and routine work. They stressed that there is now too little time to perform all one's duties properly. In this regard their academic competency is being continuously challenged. Feelings of academic inadequacy affect the identity of academic people as they realise themselves and act out their academic identity by conducting research, producing new knowledge and teaching new generations of students wholly on their own. If, as they attempt to carry out these duties, they are seriously impeded by external pressures and restrictions, this not only impairs their working conditions but also undermines their academic identity (Henkel 2000).

Naturally, administrative and leadership duties increase as an academic ascends the academic hierarchy. It came as something of a surprise to some of the doctors that administrative duties take so much of their time and energy. Some of them had played with the idea that "... you could make a charge of dereliction of duty or something about not doing all your duties as a professor ...". Others pitied the professors' lot:

> I have been observing these our poor professors wasting away doing administrative tasks. The academe could use some time thinking, when a professor is appointed, whether they were engaged as administrative bureaucrats or are we misusing them. They are supposed to develop their own discipline and the substance of the department but they must say no to that because they have such an awful lot of other things.

It can be observed that the administrative aspects of an academic profession have become more central as a consequence of changes in higher education policy and of administrative reforms carried out in the Finnish higher education system.

2. It seems clear that doctoral education systems cannot be changed easily or effectually in a short time (Kogan, Bauer, Bleiklie & Henkel 2000). The obstacles may be simultaneously ideological, financial and attitudinal. Every national higher education system has its own traditions which influence any reforms. Such national aspects must be included in any system-level analysis (see chapter 2 in this book).

In Finland, the ideal of a doctoral dissertation as an individual project which, thanks to its thoroughness, makes an original contribution to knowledge is still vital in most fields of research. Traditionally, a doctoral thesis has been perceived as the life's work of an academic, not as a starting point for one's academic or professional career. This conception has gradually changed due to internal pressures within the academic world and the demands of society. At present there is a widespread discussion about the ways in which doctors benefit society, and the number of completed doctoral degrees is a core element of national higher education policy. Moreover, doctoral education of a high standard is assumed to ensure Finland a good competitive position in international science and scholarship and the international economy.

The graduate school reform has achieved the aim of making the doctoral education system more effective and comprehensive in every discipline and field of study. The system has received substantial investments and been allocated considerable resources. It has been asserted that such reforms have a nearly unavoidable tendency to create some ideal model for doctoral training and research (Kogan et al. 2000). In Finland it has been argued that our graduate school scheme emulates US graduate schools too closely and that the basic model for research has been adopted from the natural sciences. From the outset of its implementation, there has been quite an animated debate for and against the graduate school system in many fields of social action. 'Mass production of doctors' is the most widely criticised function of the new system. Many people have expressed doubts about whether our society and many fields of research really need such a great number of doctors. Additionally, as the arguments put forward by the study's interviewees indicated, with more and more doctors there will be an inflationary fall in the value of a doctoral

degree. Given this, an increase in unemployment rates among doctors in the near future is considered inevitable.

For all that, the graduate school system now covers all universities and disciplines in Finland, and there are about 4000 doctoral students preparing their doctoral theses in graduate schools. This year the number of graduate schools is rising to 108. The schools are not as uniform as has been claimed; there are different ways to organise doctoral training and research successfully. There are graduate schools based exclusively in one university and covering a single discipline with its special fields, and graduate schools which are forming large network organisations throughout the country and combining a variety of disciplines (see Aittola and Määttä 1998).

Most of the interviewees have not themselves attended graduate schools. Instead, their experiences come from the previous doctoral training arrangements. In recent years many of the doctors have, however, become acquainted with graduate schools as supervisors of their own doctoral students. In those positions their expertise and visions of doctoral education are being put to use in the new system. In Finland the traditional doctoral training system is still functioning alongside the graduate school system, and there is a great deal of overlap.

3. Ranking disciplines has become commonplace in today's university. The specific ranking criteria may be more or less clear, but all involve productivity measures. Continuous evaluation of academic activity easily creates a climate of competition and tension. It is not, however, possible to eliminate this contest because resources are allocated on the basis of evaluations of results. Furthermore, the academic system itself requires that everyone from an individual academic to research teams, departments and universities competes for authority and higher positions in national and international academic hierarchies (Bourdieu 1988).

Scientific recognition and nationwide and world-wide publicity seem to be the most sought-after goals of academic activity. One must pursue a top position in a specific research field. In this sense, the internationalisation as an aspect of the globalisation process is an inherent aspect of academic everyday life. Nevertheless, different disciplines do not have the same potential to make the newest world-level discoveries in their research areas. Especially in the humanities, research problems tend to be inherently complex and manifold. As Bleiklie (2000) points out, time is a central resource in these research

fields. The structure of knowledge in the humanities makes it impossible to achieve a continuous flow of findings and reports and cut one's research findings into small slices for publication, as can be done in some natural sciences.

Research funding policies vary in different countries according to economic conditions in each society and varying science policy interests. The doctors stressed that the natural sciences and especially information technology has a priority in Finnish science policy. They were surprised that a tendency to channel money into these research fields has become so evident. Moreover, they maintain that the centres of excellence are taking most of the public research resources. In such a situation, if a discipline can no longer be certain of access to basic resources, long-term planning and work will become difficult. In academic life this affects both research and training practices.

It has been argued that when there is a need for educated labour in some areas of society, applied research and short-term training which is easy to deliver are more highly valued than basic research or the possession of extensive and profound knowledge of some special area (Bauman 2001). Nonetheless, in Finland the field of information technology has just now a urgent need for experts with doctoral training. Accordingly, both science policy and higher education policy are favouring research and education that will contribute to the specialised use of new information technology.

4. In the early years of the new century traditional and more modern views of what is the ideal of university are operating side by side. Traditional features of university such as university autonomy and freedom of research, teaching and studying are widely valued as representing the inner life of university. In this book we are suggesting that we are living in mass universities. The massification process does not take place in a vacuum; it parallels changes in the larger society.

One of the most critical arguments concerning the university of today revolves around the relevance of university-based knowledge and research. Bauman (2001) has very rigorously questioned the position of university in postmodern society. He argues that both the autonomy and centrality and the authority of university are in crisis. Its production and dissemination of knowledge are being challenged by other agencies. Bauman (2001) asserts: "It is the media value of the news, rather than the orthodox university standards of scholarly significance, which determines the hierarchy of authority..." (p.130) concluding that "the claim of academia to be the only and the natural seat for

those 'in pursuit of higher learning' sounds increasingly hollow to the ears of everybody except those who voice it" (ibid., p.131). Furthermore, he stresses that academic people are now forced to play the game of notoriety: "The present version of Descartes's cogito would be: I am talked about, therefore I am" (133).

Consequently, when it is assumed that university is in a deep crisis in a changing society, the role, the values and functions of university must be consciously assessed – and first of all, university must cope with the 'metachange', "the change in the fashion in which the situation is changing..." (Bauman 2001, 136).

References

Aittola, H. 1995. Tutkimustyön ohjaus ja ohjaussuhteet tieteellisessä jatkokoulutuksessa (Mentoring in postgraduate education). Jyväskylän yliopisto. Jyväskylä Studies in Education, Psychology and Social Research 111. (English Summary)

Aittola, H. & Määttä, P. 1998. Tohtoriksi tutkijakoulusta. Tutkijakoulut tieteellisten jatko-opintojen uudistajina. (Becoming a doctor via the graduate school. Graduate schools and reforming postgraduate studies). Jyväskylän yliopisto. Koulutuksen tutkimuslaitos. Tutkimuksia 3.

Atkinson, R. 1998. The life story interview. Qualitative Research Methods Series 44. Thousand Oaks, CA: Sage.

Bauman, Z. 2001. The individualized society. Oxford: Polity Press.

Becher, T. 1989. Academic tribes and territories. Milton Keynes: SRHE & Open University Press.

Bleiklie, I., Hostaker, R. & Vabo, A. 2000. Policy and practice in higher education: Reforming Norwegian universities. Higher Education Policy Series 49. London: Jessica Kingsley.

Bourdieu, P. 1988. Homo academicus. Oxford: Polity Press.

Castells, M. 1996. The information age: Economy, society and culture. Volume I: The rise of the network society. Oxford: Blackwell.

Crob, A., Krings, F. & Bangerter, A. 2001. Life markers in biographical narratives of people from three cohorts: A life span perspective in its historical context. Human Development 44, 171–190.

Delamont, S., Parry, O. & Atkinson, P. 1997. Critical mass and pedagogic continuity: Studies in academic habitus. British Journal of Sociology of Education 18 (4), 533–549.

Gerholm, T. 1990. On tacit knowledge in academia. European Journal of Education 25 (3), 263–271.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. & Trow, M. 1994. The new production of knowledge. The dynamics of science and research in contemporary

societies. London: Sage.
Henkel, M. 2000. Academic identities and policy change in higher education. Higher Education Policy Series 46. London: Jessica Kingsley.
Kivinen, O., Lehti, H. & Metsä-Tokila, T. 1997. Tohtoroitumisen ilot ja kirot. Tutkijankammiosta työelämään. (The joys and hardships of becoming a doctor. From the researcher's den into working life). Turun yliopisto. Koulutussosiologian tutkimuskeskuksen raportteja 40.
Kogan, M., Bauer, M., Bleiklie, I. & Henkel, M. 2000. Transforming higher education. A comparative study. Higher Education Policy Series 57. London: Jessica Kingsley.
KOTA data base [Online]. Available: http://www.csc.fi/kota/kota.html [2 May 2001].
Laiho, I. 1997. Mestareiden opissa. Tutkijakoulutus Suomessa sotien jälkeen. (Trained by masters. Finnish postgraduate education and researcher training after the wars). Turun yliopisto. Koulutussosiologian tutkimuskeskuksen raportti 42.
Mannheim, K. 1952. The problem of generations. In K. Mannheim (ed.) Essays on the sociology of knowledge. London: Routledge & Kegan Paul, 276–321.
Määttä, P., Valkonen, S. & Aittola, H. (Forthcoming). Tutkijakoulut ja jatko-opiskelun tehostaminen. (Graduate schools and the effiency of doctoral studies). Yliopistotieto.
Rahkonen, K. 1992. The field of intellectuals: The case of Finland. University of Helsinki. Department of Social Policy. Reprint series B 39.
Sporn, B. 2000. Adaptive university structures. An analysis of adaptation to socioeconomic environments of US and European universities. Higher Education Policy Series 54. London: Jessica Kingsley.
Virtanen, M. 2001. Fennomanian perilliset. Poliittiset traditiot ja sukupolvien dynamiikka. (The heirs of Fennomans. Political traditions and the dynamics of generations). Hämeenlinna: SKS 831.
Välimaa, J. (ed.) 1998. Tohtori tuli taloon? Tutkimus tohtoreista ja pk-yrityksistä (Is there a doctor in the house? A study of doctors and SMEs). Jyväskylän yliopisto: Koulutuksen tutkimuslaitos.
Välimaa, J. 2001. The changing nature of academic employment in Finnish higher education. In J. Enders (ed.) Academic staff in Europe: Changing contexts and conditions. Westport, CT: Greenwood, 67–90.

Chapter 7

PENTTI MÄÄTTÄ

Doctoral Studies in the 1990s: From Elite to Mass Training?

Two things distinguish Finnish doctoral education of the late 1990s from that of the late 1980s. Firstly, the number of degrees awarded, secondly, the way in which doctoral training is organized. In 1999 the number of new doctorates was almost three times as high as in 1989. At the end of the 1980s very few students worked on programmes that could have been called organized, whereas towards the end of the next decade a fourth of all doctoral students belonged to what are known as graduate schools.

The restructuring and enlargement of doctoral education in the last few decades is in no way a Finnish peculiarity (see, for example, Tvede & Kyvik 1996; Kivinen, Ahola & Kaipainen 1999). Many European countries have taken measures to enhance the performance of their higher education systems, including graduate education. The repertoire of policy measures stretch from financing of education to curricula and organization, including reforms of degree systems (Two decades of reform in higher education in Europe 2000). Basically, the question is one of scientific (and economic) competitiveness in an internationalizing world. The chief rival of the uniting EU countries is the USA, and in any case those looking for a more effective graduate education institution turn there for models. The leading position of American science has been indisputable after World War II. This has been very much a part of the zeitgeist also in Finland.

Naturally, the qualitative and quantitative aspects of the development of graduate education are intertwined. In this article I shall, however, focus on the first of the above-mentioned trends in Finnish doctoral education. I shall look for answers to three questions: first, what have been the causes of such a huge increase within only a decade, and second, did some fields of study or universities profit from the growth more than others? I shall also analyse the changes that occured in gender relations: did one gender contribute to the growth more than the other?

Researcher Training in Higher Education and Science Policy

To begin with, it is worth noticing that the term (post)graduate education refers in Finland always and solely to researcher training after the MA or another equivalent degree. On the other hand, as long as the doctoral degree was basically a merit acquired by those whose aim was to become a university professor, no graduate education as an organized activity really existed. Doctoral studies were mostly an individual endeavour carried out under the more or less close supervision of the chair-holding professor (Aittola 1995).

It was only in the 1980s, that the enhancement of doctoral studies was seriously taken on the agenda of Finnish higher education policy. Several committees and working groups proposed more cooperation between universities and more scholarships for students, but this did not actually lead to any marked increase in the intensity of inter-university cooperation or the number of scholarships. Formally there were, for example, about 40 inter-university doctoral programmes operating in 1993, but only one out of ten doctoral students belonged to them (Laiho 1997). Because of organizational inertia, no effective measures could be implemented before the mid-nineties.

Probably it was the economic depression that begun in 1992 which broke the ice. The country had to find ways out of it, and the term "innovation system" was introduced into social and political discourse (Towards an innovative society 1993). Higher education, researcher training and research were considered important elements in the new strategy of national survival. Graduate schools and centres of excellence were brought in as practical tools for promoting these activities. In a way, both can be seen as different aspects of

the recently adopted ideology of management by results, which has, since then, in many ways remodelled the operational context of universities in Finland.

Traditionally, Finnish universities had been financed from the state budget, chiefly according to the number of personnel they had. Extra money for research was available from the Academy of Finland. During the two or three last decades the situation was, however, already changing. In the 1970s different ministries began to finance more and more university-based applied research. The universities have benefited also from the establishment of a special state-owned fund, Tekes (National Technology Agency), which has supported technologically oriented research since the mid-eighties. In addition, ever more and more private resources have been finding their way into the universities as the regulations concerning research contracts were liberated. All this has resulted in a quantitative rise in the volume of research activity and in number of younger research staff employed in Finnish universities.

An essentially qualitative change in national science policy was the establishment of what are termed centres of excellence in 1995. According to the reasoning behind this innovation, better use might be made of resources when a part of them are assigned to institutions or research programmes which already have proved themselves top class. One criterion used in selecting these top institutions and programmes has been the quality and efficiency of their doctoral training activities (National strategy for centers of excellence in research 1997).

A further step was to establish, also in 1995, nearly 100 graduate schools by granting them scholarships for some 1,000 doctoral students and money for courses, seminars and so on. In 1998/9 the graduate school system was reorganized and expanded (Research, researcher training and graduate schools in Finland 1999). The significance of these schools can be realised better when we compare the number of new scholarships with the number of university assistants, who traditionally have constituted the main pool of new PhDs, and, to a lesser extent, of MDs. In 1995 there were about 1,800 university assistants, and besides teaching, performing administrative duties and so on they could (and still can) devote only a minor portion of their time to doctoral studies.

However, because an increase in the number of doctoral disputations could be noted as early as in the mid-eighties, after which the trend has continued

year after year almost without exception, the graduate schools or the centres of excellence can account only for a minor portion of the rise in the number of doctoral degrees taken. In 1981, for example, Finnish universities awarded 324 doctoral degrees[1]. In 1985 the figure was somewhat lower, 292. This plateauing was followed by a period of a rapid growth, with 490 new PhDs/MDs granted in 1990 765 in 1995 and 1,156 in 2000.

The main cause of this upward trend has clearly been the earlier increase in research resources and the intensified normal research activity referred to above. However, because the trend emerged in parallel with the rise in research funding and the taking on of new research personnel, the expanded investment cannot alone explain the phenomenon. A reform of basic degrees a few years earlier, around 1980, is an obvious contributing cause. The reform abolished the then lower academic degrees (see chapter 3 in this book), and the number of higher (MA and other equivalent) degrees began to rise rapidly. The effect of this reform has multiplied as a result of gradual increments in the number of new university entrants. Simply put, after the degree reform we have had more and more people with an academic education, who also have the right to take up researcher training.

Change in the Distribution of Doctoral Degrees by Field of Study

The right to undertake doctoral studies has been practically unlimited in Finland. (In fact, only the new graduate schools have selected their students on some explicit criteria.) This right has most often been exercised successfully in the medical field. As a result, at the end of both the eighties and the nineties, for example, the number of MDs exceeded the number of doctoral degrees awarded in any other field although the field of medicine is not among the big ones at the undergraduate (pre-MA) level. Both in the 1980s and the 1990s, the natural sciences, engineering and architecture, the humanities,

[1] The following discussion is based on the KOTA data base unless noted otherwise. The KOTA data base is an electronic university information system maintained by central educational authorities. The first year it covers is 1981.

and the social sciences came next in terms of size. As shown in Table 1 below, about four fifths of the new PhDs/MDs gained their doctorate in these fields.

Table 1. Doctoral degrees awarded in 1988–1990 and 1998–2000 by field of study.

Field of study	1988 –1990	1998 –2000	Growth*
Medicine	397	749	1.89
Natural sciences	315	691	2.19
Engineering & architecture	151	502	3.32
Humanities	96	295	3.07
Social sciences	81	258	3.19
Agriculture & forestry	48	134	2.79
Education	39	165	4.23
Economics & business	30	148	4.93
Psychology	28	58	2.07
Theology	28	54	1.93
Law	20	35	1.75
Pharmacy	19	33	1.74
Dentistry	15	43	2.87
Health care	11	87	7.91
Veterinary medicine	11	21	1.91
Arts	2	22	11.00
Sports	2	14	7.00
Total	1293	3309	2.56

Source: KOTA data base.
* Number of degrees in 1998–2000 per number of degrees in 1988–1990.

Despite this relative stability, the rate of development has not been even in different fields. The pool of new doctors has grown most rapidly in some small fields, in arts, in health care and in the sport sciences, but the figures for economics and business and for education are also very impressive. In the big study fields the growth figures are well above the average not only in engineering and architecture but also in the social sciences and the humanities. Medicine and the natural sciences, on the other hand, lag far behind the average rate of growth.

While the factors mentioned in the previous section have affected individual fields unevenly, no decline can be observed in any field.In addition, we can calculate from Table 1 that 40 per cent of the total growth in PhD/MD figures is accounted for by the natural sciences, engineering and architecture, and agriculture and forestry. This has been a direct effect of Finnish science and higher education policy, for the intake of new students, the increased research financing and, finally, investments in the graduate schools were all intented to promote research, researcher training and studying in the technology and natural resources sector. The increased number of doctorates in economics and business stems partly from the same favourable conditions. Thus, almost half the growth has taken place in the fields which have formed the nucleus of Finnish science and higher education policy.

The impressive increase in the number of new PhDs conferred in the fields of arts, health care and education can similarly be explained by the policy measures undertaken by the state during the last few decades. First, in most subfields of the arts (the fine arts, design, music and theater) doctoral degrees were introduced only in the 1990s. Second, both health care and education were elevated to the academic pantheon quite recently, health care in the 1980s and eduction in the 1970s. It is therefore quite reasonable that in these fields doctoral training produced distinctly more dissertations in the late nineties than in the late eighties.

It is somewhat more difficult to explain the above-average growth in doctoral degrees awarded in the social sciences and the humanities. Neither has been at the top of the list of disciplines to be especially supported. In spite of this, both fields saw an increase in the intake of new students in the late seventies and in the eighties. Thus, it is probably the move from a two-step basic degree system (an intermediate degree below the MA) to the one-step system (MA only) in the beginning of the 1980s which can explain a major part of the growth rates in these academic arenas. Particularly in the humanities, the reform of the curriculum has been an important factor. But there may be also other causes or reasons for the heightened interests in doctoral studies precisely in these fields, such as worsened career possibilities on the labour market as the economic depression of the early 1990s was soon followed by severe budget cuts in the public sector.

Change in the Distribution of Doctoral Degrees between Universities

It was noted above that the sharpness of the increase in degree figures varies from field to field. Therefore, as there are differences in the range of subjects offered by different Finnish universities, we can expect differences also in the degree productivity and in the way in which production rates have changed during the 1990s. However, if we want a fair description of possible institutional differences in the efficiency of doctoral training, we must take into account also the age of the institutions in question. The lenght of academic tradition naturally affects the production of doctors if some of the institutions involved are very young as is the case in Finland. A third factor to be taken into consideration is the location of the different universities, whether at the national center or in the provinces. In a traditionally monocentric country like Finland this may have a considerable effect on an institution´s degree productivity at the (post)graduate level. Understandably, the two last-mentioned factors correlate strongly.

Today there are 20 universities in Finland. In order to make the following description easier to follow I have classified them into four groups. The first of these consists of the universities in the metropolitan area, Helsinki. These universities are eight in number; they are old-established institutions although the colleges of arts have aquired the status of a university quite recently. The three universities in Turku form the second group. Like Helsinki-based universities, they have long traditions and are situated in the southern part of the country even though outside the metropolitan area. The universities of Oulu, Tampere (2) and Jyväskylä form the third group. They were founded in 1958–1965 and have therefore a fairly short history as universities even if the institutions in Tampere and Jyväskylä did evolve from earlier single-faculty colleges. The rest of the universities (5) were established or began their operations around 1970, four of them in the eastern and far northern parts of the country. The University of Lapland was founded, however, in 1979.

Table 2 indicates that the growth in the number of PhDs/MDs granted by the universities in Turku during the 1990s corresponds to the national average. The metropolitan universities have seen a clearly below-average but the universities established in the sixties and the seventies an above-average increase in their productivity.

Table 2. Doctoral degrees awarded in 1988–1990 and 1998–2000 by university group.

University group	1988 –1990	1998 –2000	Growth*
Metropolitan area	**700**	**1419**	**2.03**
University of Helsinki	581	1050	1.81
Helsinki University of Technology	100	282	2.82
Helsinki School of Economics and Business Administration	10	46	11.00
Swedish School of Economics and Business Administration	7	21	4.60
Art universities (4)	2	20	10.00
Turku	**200**	**504**	**2.52**
University of Turku	151	350	2.32
Åbo Akademi University	47	131	2.79
Turku School of Economics and Business Administration	2	23	11.50
Universities of the sixties	**271**	**952**	**3.52**
University of Oulu	104	347	3.34
University of Tampere	76	278	3.66
University of Jyväskylä	67	228	3.40
Tampere University of Technology	24	99	4.13
Universities of the seventies	**122**	**434**	**3.56**
University of Kuopio	85	189	2.22
University of Joensuu	26	149	5.73
Lappeenranta University of Technology	4	44	11.00
University of Lapland	4	29	7.25
University of Vaasa	3	23	7.67
Total	**1293**	**3309**	**2.56**

Source: KOTA data base.

* Number of degrees in 1998–2000 per number of degrees in 1988–1990.

Among all such institutions the University of Helsinki shows the most modest percentatage of growth. In the Helsinki University of Technology the increase in the number of doctoral degrees is slightly above the national average but clearly below the growth in productivity achieved in the other technological universities. The two economics and business universities seem to be the only real winners of the game in the metropolitan area. The picture is about the same, only with slightly higher production figures, as regards the

universities in Turku. The Turku School of Economics and Business Administration takes the lead while (Swedish-language) Åbo Akademi University beats the (Finnish-language) University of Turku. Economics and business and engineering (but not architecture) are both taught at Åbo Akademi University while the University of Turku offers neither. The importance of having engineering in the range subjects offered can be seen also in the development of productivity in the two university groups formed by the sixties and the seventies. Considered as a whole, these groups seem to have developed at the same rate. However, if the University of Kuopio is left out, the number of PhDs/MDs has increased more rapidly in the seventies universities than in the sixties ones. The quite slow growth in the University of Kuopio can be attributed to the fact that it has been characteristically a medical university (cf. Table 1).

The indices of Table 2 prove that the differences between the university groups do not derive primarily from any differential weighting of the subject areas represented in those groups. In fact, on the basis of the subject ranges we could even have expected that the metropolitan universities would have profited most of the science and higher education policy of the eighties and the nineties. On the other hand, we have to note that not only were quite a number of new universities founded in the sixties and the seventies, but that ever since it has been these new institutions which have accounted for a major portion of the increase in the number of university entrants.

In any case, in the 1990s the amount of doctoral disputations increased most rapidly in the new(er) universities. But have these new(er) institutions really taken their place on the academic "battlefields"? Perhaps only the doctor/professor ratio could be considered a strict test of this. According to the KOTA data base, this test seems to show that the universities in the metropolitan area remain more efficient than the provincial universities. This finding must, however, be intepreted with care. First, it is probable that the students of the metropolitan universities are, in general, more achievement-oriented than the students enrolled in the other universities because more often than in the other parts of the country, university students in Helsinki come from the upper socioeconomic strata of Finnish society (Liljander 1998). Second, the metropolitan area offers people with an academic education the most numerous and naturally also the most rewarding employment or career openings. Therefore, although it is usual in Finland to take one´s doctor´s degree in the same university as one´s basic (MA or equivalent) degree, internal

migration to the metropolitan area (Haapakorpi 1989) brings the universities of the region also potential doctoral students - while simultaneously drawing them away from their mother universities. Third, to a certain extent the metropolitan universities attract a disproportionate amount of available research funding (see KOTA data base and the list of the centres of excellence in Centre of excellence policies (2001)) and probably also a disproportionate number of the scholarships available in the new graduate school system. They benefit also from the sheer fact that two thirds of doctoral degrees done - and supervised - in the research institutes of the state are accepted in the metropolitan universities (Räty 1994). In sum then, the metropolitan region has been and remains a better nurturing ground for the next generation of scientists and scholars than the rest of the country.

Towards a More Equal Gender Distribution of Doctoral Degrees

It is well known that at the undergraduate level, the structure of the Finnish student body varies across the study fields (as well as across the universities) (Ahola 1995; Liljander 1998). Therefore, differences can be expected also at the (post)graduate level. The factors whose distribution in the student body is usually considered socially important are age, gender and socioeconomic background. I shall first deal with probable changes in the gender distribution of new doctors in different fields. The age issue will be discussed briefly in the next section, but possible changes in the structure of the socioeconomic background characteristics of PhDs/MDs (or of doctoral students) are rather difficult to assess and must be passed over.

Women have been relatively well represented in Finnish higher education. In 1987 their proportion exceeded, amongst the MA graduates, for the first time that of men (Statistics Finland 1989). Taking up doctoral studies, however, has been more rare among female than among male graduates. This was grasped as a problem in the early 1980s (see Women in Academia 1998) but the situation did not change very much before the 1990s as is shown in Table 3.

Table 3. The proportion (%) of female doctors in 1988–1990 and 1998–2000 in different fields of study and the growth in the number of degrees taken in both gender groups.

Field of study	1988 -1990	1998 -2000	Growth* Female	Male
Medicine	23.4	53.8	4.33	1.14
Natural sciences	21.0	37.8	3.95	1.73
Engineering & architecture	7.3	16.7	7.64	2.77
Humanities	34.4	46.8	4.18	2.49
Social sciences	17.3	45.7	8.43	2.09
Agriculture & forestry	33.3	45.5	3.81	2.28
Education	30.8	53.9	7.42	2.81
Economics & business	13.3	33.1	12.25	3.81
Psychology	42.9	60.3	2.92	1.44
Theology	14.3	25.9	3.50	1.67
Law	15.0	31.4	3.67	1.41
Pharmacy	31.6	60.6	3.33	1.00
Dentistry	20.0	74.4	10.67	0.92
Health care	63.6	88.5	11.00	2.50
Veterinary medicine	27.3	61.9	4.33	0.88
Arts	0.0	45.5	-	6.00
Sports	100.0	35.7	2.50	-
Total	22.4	42.9	4.91	1.88

Source: KOTA data base.

* Absolute number of degrees in 1998–2000 per absolut number of degrees in 1988–1990.

A look at the first column of the table reveals that at the end of the 1980s men gained almost four fifths of all doctoral degrees. The relative proportion of women varied, however, according to the given field, as could be expected on the basis of gender division at the undegraduate level. Women´s share of the doctoral degrees was largest in health care and smallest in engineering and architecture. At the time, health care formed a very small part of academe, engineering and architecture a big one. Otherwise there seems to have been no marked differences in the gender-dependent participation rate between the big and the small study fields.

The second column reveals that women´s share of all doctorates has doubled in only a decade, with a good two fifths of them going to women at the end of the 1990s. Furthermore, women were already on a slight majority in education and medicine; in the four paramedical fields and in psychology they were actually in a clear majority. In addition, in the humanities and the social sciences and in agriculture and forestry doctoral disputations by women were only a little less frequent than those by men. Thus, these fields seem to have undergone a major upheaval as regards gender ratio. On the other hand, although there is now a somewhat better balance between the sexes also in engineering and architecture, theology, law, and economics and business, in these study fields gender equality will not be achieved in a near future.

The third and fourth columns of the table represent the processes which have produced changes described above. The scale of the rise in women´s participation in doctoral training is further illustrated by the fact that five times as many women took a PhD/MD degree at the end of the 1990s compared to the figures some 10 years earlier. The corresponding factor for men is barely two. If the sports sciences are excluded, there is no field where the growth rate has been lower among women than among men. There are, however, interesting differences between disciplines also here.

In medicine and some allied fields the upward trend is due almost purely to female activity. Growth rates are relatively low among men also in law and psycology. In these fields, as also in the natural sciences, the humanities, the social sciences, agriculture and forestry, education, and health care even the absolut growth in the number of female PhDs/MDs has exceeded that achieved by men. However, in order to do justice to male lawyers and male agronomists we have to remind ourselves that 1998–2000 saw only one female doctor more in the field of law, and three women more in the field of agriculture and forestry. In other fields, though, the absolut differences were great. Thus, the higher growth rates among women are not a product merely of a lower starting level. In absolute terms, on the other hand, in engineering and architecture, economics and business, and theology the number of doctoral dissertations by men has grown more than those by women even though relative growth has been greater among women. This relative growth is caused largely by low starting levels, something that must be kept in mind when evaluating these particular trends.

A causal interpretation of the above findings might be as follows. Research funding of the eighties and the nineties focused primarily on "useful" fields. Male doctoral students have benefited from this policy more than female ones because as regards basic studies, especially engineering and architecture have remained very much male-dominated. As also much of the increase in student intake has taken place in this study field, the relative shortage of men has led to an increasing proportion of female undergraduates (pre-MA students or equivalent) in some other fields, most notably in medicine. This and the general effort to raise the number of PhDs/MDs has then resulted in rising female participation in doctoral studies and more female doctors in these fields of study. The two diverging trends have been strenghtened by the removal of the intermediate (lower academic) degree at the undergraduate level. In economics and business, the absolute numbers of potential male doctoral students have increased manyfold during the eighties, while the opposite has happened in the humanities, the social sciences, and education, for example. As for the natural sciences and agriculture and forestry, they lie somewhere in between. They have definitely been fields favoured by the current research funding policy. At the same time, their undergraduate student body has been fairly balanced or moved towards a moderately balanced male-female ratio. As a result, there has been an ingreasingly equal division of the benefits of the science policy between men and women. Of course, the total increase of the number of female PhDs/MDs is in part also due to the gender equality debate begun in the 1980s. It has surely lowered the treshold to embark on doctoral studies among female graduates.

Scope and Efficiency of Finnish Graduate Education in International Comparison

The number of doctoral degrees taken and awarded has grown at a time when generations have shrunk in Finland. Given this, the increase could hardly have been possible without such a remarkable rise in female participation as was described in the foregoing section. In fact, Finnish women´s participation in doctoral studies in the 1990s resembles very much their "invasion" of undergraduate studies about half a century earlier. Internationally, both phenomena can be regarded as exceptional.

In 1989 the percentage of new PhDs/MDs in the average generation of men and women aged 30–39 years was 0.5 % (Statistics Finland 1991). In 1994 it had grown to 0.9, and in 1999 to 1.6 (Statistics Finland 1995, 2000). Compared with figures from some other, top-achieving countries, the Finnish figures for 1989 are surely far lower while those for 1999 probably are not. In 1996 when Finnish indicator was 1.2 (Statistics Finland 1997), the comparable number for doctoral degrees taken in the USA was 1.0 per cent (number of doctoral degrees per the average generation of people aged 30–34) (U.S. Census Bureau 1999). In Great Britain, in the academic year 1996/7 the portion of doctoral degrees in the relevant age cohort (25–34 years) was 1.1 per cent (Baldauf 1999; Statistics Finland 1999), while in Germany (30–34 years) the figure was 1.7 per cent (Statistisches Bundesamt 1998). Finnish figure was thus very much in a class with that of the USA and the UK but not with that of Germany.

In any case, Finland may have achieved a fairly respectable position in the rankings of nations if only numbers are taken into account. This is, however, not the whole story. For a long time the Finnish model of (post)graduate education was regarded as inefficient. A firm conviction that this was so was in fact one of the chief arguments for the establishment of the graduate schools around the mid-nineties. They were supposed to reduce both dropping-out and the time taken to complete one´s degree. There is no doubt that both have been real problems in doctoral studies.

As every one who had taken a MA or some equivalent degree could in practice start doctoral studies, giving them up has probably been quite usual in Finland, although reliable and internationally comparable statistics are not available. Nor do we know the time really needed to complete a PhD/MD. What is known is the median age of the new doctors. This has for a long time been slightly over 36 years (Halinen 1989; Statistics Finland 1993, 1996 & 1999). As regards this figure, there has been practically no change between the mid-eighties and the late nineties although the number of dissertations has grown and there have been changes in their distribution across study fields. In general, the field-specific median age has been below the overall median in such fields as the natural sciences, engineering and architecture, and medicine, above it in such fields as the humanities and the social sciences.

Internationally these median ages can be regarded as fairly high (see Tvede & Kyvik 1996). In Germany new doctors are usually about four years younger

than in Finland. In Britain the age at which one takes one´s doctorate is probably lower still. Such comparisons do not, however, do justice to Finnish students or to their mother universities because the Finnish educational system differs in many ways from those in other countries. Attaining the British standards would surely require a reform of the system beginning from upper secondary school to doctoral training. The Finnish age level could perhaps be brought closer to the German one if the semi-obligatory licentiate phase of researcher training would be abolished; this is in fact the policy in most graduate schools. However, because a majority of doctoral students still try to gain their doctorate outside those schools, no great reduction in the duration of doctoral studies is to be expected anytime very soon. Moreover, this may not be a very bad situation after all. In the United States the median age of PhDs/MDs has been about 34 years, and even a little bit over 36 years if only individuals born in the US are included in the calculation (Kerlin 1995).

Concluding Remarks

There was a major effort in Finland in the eighties and the early nineties both to increase the number of doctoral degrees and to improve the quality and organization of the training process itself. A third objective of the policy efforts was to guide (undergraduate as well as) doctoral students to those fields of academic endeavour which were seen as those most useful to the national economy and to national well-being.

The policy has been successful. The statistics indicate continuously growing numbers of new doctors, and the graduate schools have been successfully implemented. The third objective has also been achieved, but at the same time some earlier policy measures have led, as a side effect, to an increase in the number of doctorates also in a few other, less favoured fields of study.

A possible summary of the most salient features of the Finnish system of (post)graduate education of the day would be as follows. First, doctoral degrees can be studied for in and awarded by all universities. (The new polytechnics (AMK instituitions) do not yet have this right.) Second, taking up doctoral studies is practically free (even tuition-free); this has led not only to a "massification" of these studies but, in some measure, also to a certain degree of inefficiency and obviously to a high non-completion rate (of unknown

magnitude). Third, the degree system has two steps, of which the intermediate licentiate degree is not obligatory but is still taken by a vast majority of the doctoral students. Fourth, there are two different tracks of doctoral education: the traditional, loosely and individually organized studies and training, which until now attracted most of the students, and the new institution emulating the American graduate school which will probably expand in the future and in any case produce most of the new PhDs/MDs.

Lastly, as a consequence of the bifurcation of doctoral training there may emerge an elite sector of Finnish (post)graduate education. The graduate schools (together with the centres of excellence) already form an elite sector at least in the sense that the organization of courses and so on and the studying itself are supported financially in a manner which has been only seldom possible outside them. Thus, the quality of education has surely improved. But it is still too early to assess how this new institution will affect the number of doctorates, or how much the graduate schools will shorten the median duration of doctoral studies.

References

Ahola, S. 1995. Eliitin yliopistosta massojen korkeakoulutukseen. Korkeakoulutuksen muuttuva asema yhteiskunnallisen valikoinnin järjestelmänä. (From elite to mass higher education. Changing structures of selection in Finnish higher education.) Turun yliopisto. Koulutussosiologian tutkimuskeskus. Raportti 30. (English Summary.)

Aittola, H. 1995. Tutkimustyön ohjaus ja ohjaussuhteet tieteellisessä jatkokoulutuksessa (Mentoring in postgraduate education). Jyväskylän yliopisto. Jyväskylä Studies in Education, Psychology and Social Research 111. (English Summary.)

Baldauf, B. 1999. The PhD and the labour market in the UK in the 1990s. In O. Kivinen, S. Ahola & P. Kaipainen (eds.) 1999. Towards the European model of postgraduate training. University of Turku. Research Unit for the Sociology of Education. Research Report 50, 109–156.

Centre of excellence policies: Aims and practices in 17 countries. 2001. Helsinki: Publications of the Academy of Finland 2/01.

Haapakorpi, A. 1989. Ylemmän korkeakoulututkinnon suorittaneiden sijoittuminen työmarkkinoille (Graduates´ destinations on the Finnish labour market). Opetusministeriö. Korkeakoulu- ja tiedeosaston julkaisusarja 69. Helsinki. (English Summary.)

Halinen, A. 1989. Selvitys vuonna 1988 Suomen korkeakouluissa väitelleiden jatko-opintojen rahoituksesta ("Funding postgraduate studies: A report on Finnish doctoral candidates who took their degree in 1998"). Suomen Akatemian julkaisuja 10/89. (In Finnish.)

156

Kerlin, S. P. 1995. Pursuit of the Ph.D.: "Survival of the fittest", or is it time for a new approach? Education Policy Analysis Archives 3 (16). Available: http://olam.ed.asu.edu/epaa/v3n16.html. 3 October 2001.

Kivinen, O., Ahola, S. & Kaipainen, P. (eds.) 1999. Towards the European model of postgraduate training. University of Turku. Research Unif for the Sociology of Education. Research Report 50.

KOTA data base. Available: http://www.csc.fi/kota/kota.html. 4 May 2001.

Laiho, I. 1997. Mestareiden opissa. Tutkijakoulutus Suomessa sotien jälkeen. (Trained by masters. Finnish postgraduate education and research training after the wars). Turun yliopisto. Koulutussosiologian tutkimuskeskus. Raportti 42. (English Summary.)

Liljander, J.-P. 1998. Gains and losses on academic transfer markets: Dropping out and course-switching in higher education. British Journal of Sociology of Education 19 (4), 479–495.

National strategy for centers of excellence in research 1997. Publications of the Academy of Finland 6/97. Helsinki.

Research, researcher training and graduate schools in Finland 1999. Helsinki: Ministry of Education, Department for Education and Science Policy.

Räty, T. 1994. Valtion tutkimuslaitoksissa vuosina 1989–1993 tehdyt väitöskirjat ("Doctoral degrees done in 1989–1993 in the research institutes of the state"). Suomen Akatemia tiedottaa 9, 5–12.(In Finnish.)

Statistics Finland. 1989. Statistical yearbook of Finland 1989. Helsinki: Valtion painatuskeskus.

Statistics Finland. 1991. Statistical yearbook of Finland 1991. Helsinki: Valtion painatuskeskus.

Statistics Finland. 1995. Statistical yearbook of Finland 1995. Helsinki: Painatuskeskus.

Statistics Finland. 1997. Statistical yearbook of Finland 1997. Hämeenlinna: Karisto.

Statistics Finland. 1999. Statistical yearbook of Finland 1999. Hämeenlinna: Karisto.

Statistics Finland. 2000. Statistical yearbook of Finland 2000. Keuruu: Otava.

Statistisches Bundesamt. 1998. Statistisches Jahrbuch 1998 für die Bundesrepublik Deutschland. Stuttgart: Metzler-Poeschel.

Tilastokeskus. 1993. Korkeakoulut 1993. SVT. Koulutus 1993:10. Helsinki. (In Finnish.)

Tilastokeskus. 1996. Korkeakoulut 1996. SVT. Koulutus 1996:12. Helsinki. (In Finnish.)

Tilastokeskus. 1999. Oppilaitostilastot 1999. SVT. Koulutus 1999:6. Helsinki. (In Finnish.)

Towards an innovative society: A development strategy for Finland. 1993. Helsinki: Science and Technology Policy Council of Finland.

Tvede, O. & Kyvik, S. 1996. Doktorgrader og forskeropplaering: internasjonale erfaringer og perspektiver. En sammenlikning av 9 OECD-land ("Doctorates and researcher training: International experiences and perspectives. A comparison between nine OECD countries"). Oslo: Norsk institutt for studier av forskning og utdanning. (In Norwegian.)

Two decades of reform in higher education in Europe: 1980 onwards. 2000. Brussels: Eurydice. The Information Network on Education in Europe.

U.S. Census Bureau. 1999. Statistical abstract of the United States: 1999 (119th edition). Washington, DC: U.S. Government Printing Office.

Women in Academia: Report of the working group appointed by the Academy of Finland. 1998. Publications of the Academy of Finland 3/98. Helsinki.

Chapter 8

ELLEN PIESANEN

The Open University in a Massifying Higher Education System

Introduction

The article presents a study whose purpose was to examine the place of the Open University in the Finnish higher education system. The regular universities which deliver Open University education in Finland collaborate with a very broad range of educational institutions such as summer universities, adult education centres[1] and folk high schools. This network makes it possible to offer Open University courses all over the country (see Figure 1 in Chapter 2); it is also one of the reasons why the Open University in Finland contributes to social and educational equality by widening participation in higher education. The other central factors linked with the Open University that broaden participation include open access, opportunities for distance learning, and the existence of the Open University route to regular university studies.

The empirical part of the article is based on a follow-up study of Finnish Open University students from the years 1994–2000 (N = 1213). The data

[1] In Finland, adult education centres provide liberal adult education and deliver a variety of courses, including Open University courses but also language instruction, hobby-related courses and so on. (Note: The Finnish *vocational* adult education centres do not deliver open university instruction.)

158

show that the network of cooperating institutions offers a substantial proportion of the students access to higher education, often provided close to their homes. The students under 25 were followed also to find out what kind of educational and working careers they have had and what kind of role their Open University studies have played in the ways in which these have developed.

The Open University as a Study Forum of a Massifying Higher Education System

Today's educational market shows clearly that esteem for education is increasing. Our society is marked by strong optimism about education, and in the last few years education has become more important than ever. It is considered an essential resource not only from the perspective of intellectual growth among the population but equally from that of the economic growth of the nation. This is reflected also in growing demand for tertiary education both in Finland and elsewhere (Harvey & Knight 1996; Furlong & Cartmel 1997; Neal 1998; Kogan & Hanney 2000). Taking university courses is becoming an increasingly valuable asset on the educational market. As a result, the educational mission of universities is rapidly expanding to include adult education in addition to the traditional degree programmes. The function of the educational marketplace is to satisfy the education-related needs of various parties.

Another characteristic feature of today's society is its strong privatisation, an emphasis on individuality. Accordingly, individualistic perspectives have become more prominent in various sectors of society, not least as regards educational demand. An emphasis on individuality is seen also in the higher education system, universities and other higher education institutions having, after all, traditionally placed a strong stress on communal values. In higher education these changes are reflected both in structural factors and educational contents. When the existing higher education system proved incapable of meeting the growing demand for higher education, the authorities responsible for the planning, provision and delivery of tertiary education were obliged to start looking for new educational policies. In Finland the response has been not only an increase in the number of student places in regular universities and in polytechnics (AMK institutions), but also an expansion of the activities of the Open University.

At same time it has been found necessary to develop also the instruction given by higher education institutions so as to better meet modern requirements. As a result, their educational provision has been differentiated as regards both the contents and the organisation and methods of teaching. The institutions providing tertiary-level education are delivering increasingly differentiated curricula, thus offering students opportunities to combine different studies with a view to meeting their specific personal goals. This is an important asset on the educational market because graduates should, when they enter working life, be not only innovative implementers of new ideas but also the best experts in their own discipline. According to Smith and Webster (1997) for example, among the other factors that have also contributed to the powerful increase in educational demand is the growth of information technology, resulting in an explosive rise in the number of various higher education institutions. At the same time students have become consumers, and both forms of teaching and the entire university culture and its status have changed.

The Open University as a Part of an Adult Higher Education System

The adult education system in Finland has a wide range of functions and activities, covering both vocational and general adult education and including several different types of organisation and institution. The system is in part highly autonomous, with a decentralised decision-making system. Traditionally, the aim of adult education provision has been to foster individualisation, personal growth, career development and self-realisation. Another central consideration is making adult education available as widely as possible in the various parts of the country. This has enabled the promotion of educational equality, of importance also in terms of regional development (Piesanen 2001).

The Open University in Finland functions as a part of the Finnish adult education system, and traditionally it has been a provider of tertiary-level adult education[2]. The Finnish Open University was originally established to

[2] According to the Finnish Universities Act 1997 (7§), universities can, in addition to basic studies, deliver vocational continuing education and Open University education.

forward educational equality and give adult people opportunities to take up tertiary-level studies regardless of their educational background. Thus, the basic principles underlying the instruction offered by the Open University include particularly those of equality and open access. As a result, the role of the Open University as an adult education provider is partly different from that of the other adult education organisations. Considered as a form of adult education, studies at the Open University are much more self-directed, independent and wide-ranging than studies in many adult education institutions of other kinds.

Traditionally, students see Open University studies mainly as vocational further training, but many adults have attended the Open University also in the pursuit of a general education or as a hobby. Thus, their studies have been more general than vocational. The basic aim of Open University studies has differed particularly from that of degree-oriented vocational adult education. However, in the last few years, as the student structure has grown younger, students have become much more interested in taking degrees. As regards these students, it is at least indirectly possible to talk about degree-oriented vocational adult education. Altogether, the Open University is able to offer educational opportunities to suit people in very diverse life situations, which foregrounds individual study options.

The Open University in Finland is a decentralised system where the regular universities and other educational institutions, such as adult education institutions and summer universities, offer the adult population an opportunity to study parts of the basic degree curriculum of the universities, irrespective of where they live. Open University education is provided both by multi-subject universities and art and technical universities (see Table 1)[3].

The Open University delivers an extensive range of courses and examinations but confers no degrees: Regardless of their educational background, OU students can take blocks of studies that form parts of a lower or higher degree

[3] According to the 2000 student statistics, the five biggest open universities in Finland were the Open Universities of Helsinki (19 176 (net) students), Jyväskylä (15 318), Turku (9 498), Tampere (6 525) and Oulu (4 680). Altogether the open universities had a total of 80 002 students. The total number of credits earned (study weeks accumulated) was 304 371; the calculatory number of full-time student places in open universities was 17 516. (KOTA-database.)

syllabus, but not the degrees themselves. After having completed approximately a third of a degree programme (in most cases studies of a minimum of 60 credits) students can be admitted as regular university students. This is called the Open University Route. However, only a very small proportion of all university students take this route.

Some 40 per cent of the instruction is given in the form of multi-method teaching, such as audio teaching supplemented with written and taped materials. A nationwide tutor network is being constructed to support this system. New information technologies are being increasingly used in the delivery of instruction.

The most popular open university subjects have been education, the social sciences and the humanities. However, today there are courses covering also almost all sciences, for example engineering, the natural sciences, economics and art subjects. This expanded range of courses significantly enhances the usefulness of the Open University in providing qualifications for specific occupations.

In 1993, reasons of labour policy led to a significant expansion of the scope of Open University instruction through the abolition of the minimum admissions age of 25. After this expansion, enrolments have increased and the range of subjects taught has broadened. Since the late 1980s, the number of OU students has grown rapidly. Today the Finnish Open University is attended by some 80 000 students, over a third of them young adults aged 18–25, and half under 30.

The Operational Models of the Open University: Wide-Ranging Cooperation Between Educational Institutions

The Operational Model of the Open University

Originally, when Finland began to develop an Open University, the model followed was largely that of the UK, where Open University education was defined as being open to all students irrespective of background. Further, its functions were not to be tied to any particular place or to particular teaching

methods, and there was to be responsiveness to new operational ideas. After the establishment of the Open University in the UK, Open University instruction has been delivered in various parts of the world on largely the same principles. However, implementation methods are often different in different countries. (Rumble & Harry 1982; Daniel 1995; Houle 1996; Daniel 1997; Piesanen 1997.)

Differences from the original prototype are seen also in the Finnish model of the Open University, particularly as regards operational modes, such as, for example, a lack of the right to confer degrees, and the specific ways in which Open University activities are organised. In these respects the Open University in Finland can be considered a quite distinct Finnish system of educational provision.

Today Open University instruction is available all over the country, and nearly all universities offer it. Different universities organise their provision in slightly different ways, and several universities have more than one form of delivery. Originally Open University courses were taught exclusively in a higher education institution's own facilities[4] and by their own teachers. The courses were given evenings and at weekends – as is still done today. Some universities, such as the University of Helsinki, have adopted what may be called a model of separate units, where a university has set up a separate extramural institution to organise Open University studies.

A very common method of implementing the Open University involves channelling the delivery of instruction through different educational institutions, some of them based outside the parent university town or city proper. The institutions that cooperate with the Open University on delivering Open University courses include, for example, summer universities, an extensive network of adult education centres and folk high schools, and many vocational education institutions. Instruction is also broadcast by the Finnish Broadcasting Company and by television. This model is a part of nearly all universities' Open University activities. What may be called the distance learning model combines (or replaces) contact teaching (eg lectures) with written distance assignments. Such distance assignments are given and supervised either

[4] Open University education is provided by universities' continuing education centres except at the University of Jyväskylä, where the Open University is a separate institute of the parent university.

in the municipalities where the students study or over the Internet. Similarly, students are tutored either face-to-face in the educational institutions or over information networks.

When Open University education consists exclusively of evening courses taught at the university or courses offered at separate units, the student must visit the given municipalities to attend centralised teaching sessions. From the perspective of open access and equality, the best alternative is a model where courses are delivered in the university town or in partner institutions and, on the other hand, through distance education. These delivery models make it possible to study in one's home area and, as a result, in very different life situations.

In the institutions cooperating with the Open University, teaching is organised mainly in two ways. Particularly the Open University courses delivered by the summer universities are given by teachers from the parent university. In such cases the university teachers conduct the contact teaching periods in the municipalities where the partner institutions are located. Particularly in folk high schools and adult education centres the courses are taught mostly by these institutions' own teachers. However, in either case the important point is that the instruction is based on the degree requirements of the parent university and delivered using procedures approved by the universities. Particular attention is paid to the quality of the teaching and to well-functioning teaching arrangements. Studies completed in partner institutions are certified by the university whose degree requirements the students have been following. Thus, the partner institutions only deliver the instruction, while in other ways the students comply with procedures observed in university towns and cities.

Cooperation Between Educational Institutions and Its Effect on OU Students

As was already observed, the Open University units cooperate with a very broad range of educational institutions such as summer universities, adult education centres and folk high schools. Table 1 shows how the various Open Universities operating in Finland use these partner institutions in organising their instruction. The main portion (about 2/3) of the provision is delivered by the regular universities themselves through their continuing education

centres. The proportion of the Open University courses taught by the partner institutions varies from one Open University to another. On average, 12 per cent of the instruction is conducted by summer universities, but as regards the Open University of Joensuu for example, a good third of the instruction is organised by summer universities. Next in order of importance as providers of Open University instruction come adult education centres (about 10%) and folk high schools (about 9%), with only some 4 per cent being delivered by other partner institutions (vocational schools, upper secondary schools etc.)

Table 1. Open Universities and their partner institutions. Proportion of gross enrolments[5] in the instructional provision of different institutions in 2000.

University	Units responsible for the provision of open university instruction in 2000				
	Continuing education centres	Adult education centres	Folk high schools	Summer universities s	Others
	%	%	%	%	%
U. of Helsinki	66.7	14.7	3.9	13.2	1.5
U. of Jyväskylä	58.1	7.2	21.2	7.5	6.0
U. of Turku	50.0	22.6	16.9	7.3	3.2
U. of Tampere	82.6	0.5	0.7	15.8	0.4
U. of Oulu	71.8	5.7	2.0	15.5	5.0
Åbo Akademi	50.7	11.3	10.5	9.1	18.4
U. of Lapland	75.6	7.1	2.9	11.3	3.1
U. of Joensuu	44.5	8.3	9.5	37.6	0.1
U. of Kuopio	67.2	2.6	4.2	18.5	7.5
U. of Vaasa	77.0	-	0.9	18.7	3.4
Sibelius Akademy	60.6	11.2	-	15.7	12.5
U. of Art and Design Helsinki	59.8	16.2	8.0	12.2	3.8

[5] The gross student figure covers all students enrolled on various Open University courses; in other words, each student is included in the enrolment of every course taken by them. Source: KOTA-database.

Theatre Academy	69.8	5.6	8.4	16.2	-
Swedish School of Economics and Business Administration	84.9	0.4	13.6	-	1.1
Helsinki U. of Technology	98.4	-	-	-	1.6
Tampere U. of Technology	100.0	-	-	-	-
Lappeenranta U. of Technology	100.0	-	-	-	-
Helsinki School of Economics and Business Administration	100.0	-	-	-	-
Turku School of Economics and Business Administration	100.0	-	-	-	-
Total	66.7	9.4	8.5	11.6	3.8

Distributed instruction makes it possible to deliver Open University education all over the country (see Figure 1 in Chapter 2). The findings show that the Open University is particularly well placed to meet demand for tertiary-level instruction in all parts of the country; this is due precisely to the existence of the partner institutions and to the fact that they offer not only contact teaching but also distance and multiform education.

The study revealed very clearly that the under -25 OU students are also well able to make good use of this extensive educational provision. According to the research findings, a little more than a third of them lived in the municipality where the Open University they were attending was based, but more than half the OU students lived at a distance from the base municipality or the environs of the base municipality of the Open University unit where they were studying. The rest (11%) lived in the neighbouring municipalities.

Some of the students living at a distance from where the Open University was based studied at their parent university using mostly distance learning methods, while others went to partner institutions of the Open University. In the municipalities surrounding the Open Universities examined in this study,

such partner institutions were in most cases adult education centres or summer universities.

The Empirical Study: Aim, Problems and Methods

The article will present the main results of a study focusing on the place of the Open University in a Finnish higher education system of the future; that is, it gives an assessment of the capacity of the Open University to respond to the challenges created by a more and more individualised society. The study discusses various perspectives involved in higher education and social policy, such as the potential of the Open University to meet increased demand for higher education, make possible individualised career paths, and contribute to the delivery of lifelong learning.

The article will consider how successfully the Open University is likely to function within a massifying higher education system. This question concerns among other things the means that the Open University has to operate on the markets of an increasingly individualised society where the needs and goals of individual students of all ages – regardless of what they are (oriented to degrees, hobbies or general education etc) – can be paid maximum attention. This requires flexibility based on a wide range of ways of organising instruction and designing learning methods.

This study of the impact of the Open University in Finland, carried out in 1994–2000, considers the expansion of the Open University and its effects on both the individual level, from the point of view of OU students under 25, and, more generally, from the perspective of Finnish higher education and labour market policy. A particular focus of the study was the role of the Open University in the formation of an under-25 young adult's career perspective and in the development of their educational and occupational careers (Piesanen 1996, 1998, 1999a). Further, the study discusses the place and functions of the Open University as a part of the process of planning and making decisions about present and future educational and social policies in Finland (Piesanen 1999b).

The most central theoretical perspectives applied in this investigation of the impact of the Open University stem from a consideration of three issues: the educational and labour markets of a progressively more individualised so-

ciety; the educational and occupational careers of a new kind that emerge on these markets as the Open University influences the development of Finnish young people's educational and occupational careers; and the implications for educational and labour market policy of these phenomena.

This article will focus particularly on the following ***research problems:***

1) How far can the Open University in Finland serve as a stepping stone to regular university studies and help OU students to gain access to regular university either through the Open University route or via normal entrance examinations?
2) How have the OU students who did enter a regular university gained their entry?
3) What kind of role do Open University studies play as regards the students' future?

Methods. The empirical section of the article is based on a follow-up study of OU students who were under 25 years of age in 1994. These very first data comprising the materials of the follow-up study were collected through surveys and interviews among students (N_{1994} = 2324) of the Open Universities linked with the regular Universities of Jyväskylä, Tampere and Turku. The rest of the data were collected in 1995, 1996 and 2000[6].

The data were analysed using, among other procedures, log-linear models and the LISREL method, which made possible the creation of a model[7] describing the individual-level impact of the Open University that explains its changing effects (Piesanen 1999a, 1999b).

---

[6] As the Tampere students could not be contacted because of missing social security numbers, the 2000 data (N = 1213) cover only students originally from Jyväskylä and Turku.

[7] The data were modelled using what is known as a LISREL model (eg Jöreskog 1979; Jöreskog & Sörbom 1979; Yli-Luoma 1996; Nummenmaa et al. 1997), constructed by means of confirmatory factor analysis. The result was a model describing the individual-level impact of the Open University, which was found to match well the follow-up materials to be examined (χ^2 = 80,070, df = 71, p = 0.216, GFI = 0.957 and AGFI = 0.936). For the modelling and analysis of the materials and interpreting the results see Piesanen 1999a.

Results of the Empirical Investigations

The Open University as a Stepping Stone to Regular University Studies

Earlier results of this research project (Piesanen 1996, 1988, 1999a, 1999b) revealed that students can use the Open University *as a testing arena* where they may not only try out their personal abilities but also test their chosen subject and the nature of university studies in general. These are important factors; in positive cases they have helped students to eventually enter university as regular students.

Also the results of the whole follow-up study show that Open University studies have the most powerful effect on those students whose educational goals involve gaining admission to regular university. This is the student group interesting from the perspective of a massifying higher education because they are young adults who wanted to enter a regular university but failed to be admitted. The Open University can serve them as a stepping stone to tertiary-level studies.

As pointed out earlier, OU students can test not only their abilities and the organisation of university studies but also the subjects themselves. Studies completed in the Open University are in many cases eventually credited as full or partial component parts of university degrees, this being the reason why Open University studies can be in many cases very useful.

In the next chapters I shall present the most central empirical results of this follow-up study concerning these factors, here complemented with the results of the analysis of the most recent data from 2000. In particular, I shall run through the most important findings about the students' transition from the Open University to regular university studies.

The Background of OU Students Admitted to Regular University

For an young adult studying there, the Open University is often only a temporary educational option, particularly when the young person has as yet acquired neither a full-time student place nor a job. The results reveal that even full-time polytechnic and upper secondary students use Open University studies to test the nature of university education and its suitability for their own studying styles. Similar behaviour could be observed among working and unem-

ployed students. The full-time polytechnic and upper secondary education students and the unemployed students were the most longtime Open University attendees. Both groups were highly university-oriented; of the unemployed students more than half wished to take a degree (Piesanen 1999a).

Given the above background data, it is in many cases impossible to estimate in clear-cut terms the role played by the Open University in OU students gaining a regular student place. The OU students who became full-time regular university students during the period covered by the study are able to make the most reliable assessments. *Of the under-25 OU students followed during the study, between 1994 and 2000, 25.9 per cent (n = 314) became regular students at a university*. This group had an above-average proportion of men, 17.2 per cent as against 13.6 per cent in the comparison group. Table 2 presents some background details of those OU students who were admitted to a regular university during the follow-up period in 1994–2000.

Of the OU students who were admitted as regular university students, nearly 80 per cent were under 28, half under 26. The men were a little older than the women (Table 2). Most (95.5%) of those who gained entry to regular higher education had a Certificate of Matriculation, while the rest had finished comprehensive school. At the beginning of the study, more than half the students announced that their main reason for attending the Open University was taking a degree, a fifth that they were studying chiefly to improve their general education, while some 10 per cent saw their studies as vocational further education (Table 2). Accordingly, nearly half of those who had obtained admission to regular higher education had adopted the aim of taking a degree in the course of their Open University studies. Most (59.2%) of them had previously studied full-time mainly in upper secondary education institutions, 14.4 per cent had been in working life and 18.2 per cent out of work, while for the rest (8.3%) the data were lacking.

At the conclusion of the study in 2000, a fifth of the OU students admitted to regular higher education had already completed a higher and 56 per cent a lower university degree. A fourth had made less progress with their studies; some of these may have given them up altogether. Of the students in this group, 19 per cent had previously taken upper secondary vocational qualifications. Altogether the number of drop-outs is small; at the end of the study 76 per cent reported that they were still at university, some 5 per cent were studying elsewhere and 12 per cent said that they were out of work. Men re-

Table 2. Some background details of the female and male OU students admitted to a regular university during the follow-up study.

	Women		Men		Total [1]	
	n	%	n	%	n	%
Age in 2000						
* 24–26 years (= 18–20 years in 1994)	108	42.4	14	26.4	122	39.6
* 27–28 years (= 20–22 years in 1994)	97	38.0	22	41.5	119	38.6
* 29–31 years (= 23–25 years in 1994)	50	19.6	17	32.1	67	21.8
Total ($\chi 2 = 6{,}1$; df = 2; $p < .05$)	255	100.0	53	100.0	308	100.0
Purpose of Open University studies in 1994						
* University degree	132	52.6	31	58.5	163	53.6
* Vocational education	27	10.8	5	9.4	32	10.5
* General education	53	21.1	9	17.0	62	20.4
* Hobby etc	5	2.0	-	-	5	1.6
* Other	34	13.5	8	15.1	42	13.8
Total (no statistically significant difference)	251	100.0	53	100.0	304	100.0
Educational and employment status in 2000						
* Student in a university	188	73.7	46	86.8	234	76.0
* Student elsewhere	14	5.5	-	-	14	4.5
* Working	32	12.5	5	9.4	37	12.0
* Unemployed	1	0.4	2	3.8	3	1.0
* Other	20	7.8	-	-	20	6.5
Total ($\chi 2 = 13{,}6$; df = 4; $p < .01$)	255	100.0	53	100.0	308	100.0

[1] 6 answers missing (unidentified)

mained university students more often than women (Table 2).

A look at the previous school achievement[8] of the OU students who had gained entry to regular higher education reveals that more than a third had had an excellent average grade in their school-leaving certificate, 8.6 or more, while more than half (51%) had been average (good average grade, ranging between 7.7 and 8.5) and 15 per satisfactory students (average grade less than 7.6). On an average, the women's average grades had been better than those of the men: more women than men have average grades above 8.6, while more men than women have average grades either in the 7.7.–8.5 range or below 7.6 ($\chi 2 = 6{,}2$; df = 2; $p < .05$). (Figure 1.)

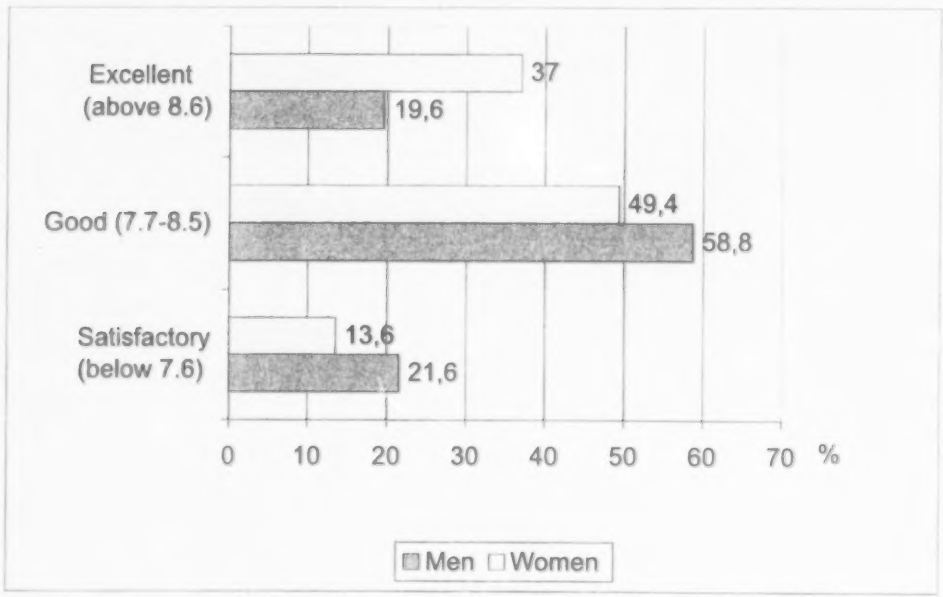


Figure 1. School achievement on leaving comprehensive or upper secondary school of OU students admitted to regular higher education (n = 314).

[8] The students' school achievement during their basic education was measured in terms of the average grade of their upper secondary school or comprehensive school leaving certificate. Further analyses were based on a variable adapted from these averages that divides the students into three groups irrespective of whether they have completed upper secondary school or only comprensive school.

As regards their background, the OU students who gained admission to regular higher education resemble each other a good deal. The most important difference concerned the original aim of their Open University studies and how it has changed during their studies. In an earlier phase of the study I characterised OU students either as 'knowers', or as 'seekers', reflected also in these final results of the study: Some OU students are fairly clear about what what and why they are studying at the Open University, while some revise their aims during their studies. In these cases Open University studies have contributed also to the formation of the students' career perspective. (Piesanen 1996.)

The Role of the Open University in Gaining Admission as a Regular Student and Being Successful in One's Studies

The empirical part of the study indicates that the role played by the Open University among students under 25 can be summed up on two main levels. Its role involves, on the one hand, the development of the students' educational and working career and, as a part of this, the process where their career perspective is formed, and, on the other hand, the students' future life.

In terms of the *formation of the students' career perspective*, the most central functions of the Open University are twofold. As an institution it makes studying possible for young people in a variety of life situations. At the same time it serves as a testing arena for trying out one's subject, personal abilities and studying style, for example. The experiences gained at Open University can induce students to redefine their educational aims and objectives.

Studies at the Open University have helped a young seeker to decide whether university is for them or not. The decision to continue to pursue a tertiary degree or turn one's attention elsewhere is clearly reflected in changes in the young person's previously adopted educational aims. The young people here called knowers had, at the stage when they entered the Open University, made at least a preliminary decision to pursue a educational career leading, in one way or another, to regular university studies. At the same time, even in their case Open University studies may have refined their career perspectives, persuading them to change their subject or even discipline. Knowers included also people who attended the Open University to complement their vocational qualifications, improve their general education or as a hobby.

Once a student's career perspective has taken shape, the Open University begins to play a new role in the life of a former OU student. The educational aims adopted by them are reflected in their future *educational and employment situation*. Depending on their educational aims the students 1) actively pursue a regular student place, 2) wish to continue their studies to improve their general education or vocational qualifications, 3) give up their studies after having been admitted to a polytechnic or an upper secondary education institution or 4) to enter working life.

One of the most central research problem of this study concerns the role played by the Open University in the development of OU students' educational and working career. This function of the Open University is most important among those young people who wish to gain entry to regular universities. In this context, the Open University emerges a factor either at the point when the young person becomes a regular university student or also in the context of their academic success.

The results showed that Open University studies affected above all success in gaining a student place, particularly when the students had applied to be admitted as a regular student in a higher education institution. This finding is very explicit. Open University studies benefited students applying not only to universities but also to polytechnics and even to upper secondary education institutions.

Most degree-oriented students take part in the normal student selection process. The opportunities offered by the Open University to 'practise' university studies, and the familiarity with the subject gained and the study skills acquired there help a young person preparing for university entrance examinations in many ways.

The role of the Open University is particularly prominent in cases where a OU student has the option of becoming a regular university student via what is known as the Open University route. Even if this option is often marginal as far as the young people who took part in the study are concerned, an awareness of its existence opens up an opportunity not available by any other means outside the normal student selection procedures. A young person hoping to take a degree knows that their dogged efforts will be rewarded, sooner or later.

Studies at the Open University affected also the students' academic success in their new studies, particularly at university but also at polytechnics and upper secondary education institutions.

The role played by the Open University in the context both of gaining entry to a regular university and achieving success in one's university studies stems from the fact that the Open University can be used as a testing arena, as a kind of training ground for university studies. The study skills and teaching methods with which the Open University acquaints its students are an important influence. An added value gained particularly by regular university students is the fact that during their Open University studies their familiarity with their own subject has grown in many ways. This familiarity with the subject and the textbooks has made later studies smoother and thus speeded them up. At the same time, entire major modules completed at the Open University have, fully or partly, substituted for modules in university degree requirements, which has shortened the time needed to finish the rest of one's studies.

The role that the Open University plays in the life of a young person wishing to be admitted as a regular university student when they eventually do enter a regular university is an excellent reflection of the original starting points of the Open University, openness and equality. Enrolling at the Open University whatever one's background can mean a new chance if one is unfamiliar with the nature of university studies and with the subject one has in mind, but particularly when one is doubtful about one's own abilities. According to the findings, the Open University makes regular university studies accessible also to those students who did less well at school but who through their Open University studies have demonstrated their qualifications for university-level studies to both themselves and other people.

Figure 2 compares assessments by OU students who have been admitted as regular university students of the role played by the Open University in their obtaining a student place and being successful in their studies, revealing that its role has been most important from the perspective of securing a student place. A fourth of the OU students who were admitted as regular university students considered that their Open University studies had played an important or a very important part in the context of their entry to regular university, a somewhat greater proportion that they had been important or very important for their academic success. More than half of the students thought that Open University studies had contributed to their success in their university studies, a little more than a third that it had similarly had a role in their being admitted as a regular university student.

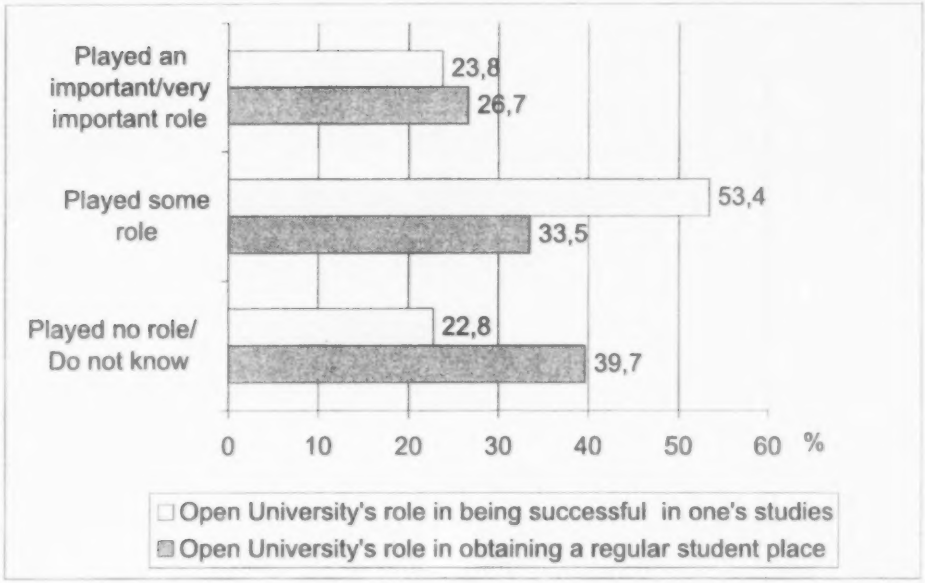


Figure 2. Role played by Open University studies in obtaining a regular student place and in being successful in one's studies (OU students who were admitted to regular university, n = 314).

An earlier stage of the study revealed the factors on which depend the *benefits of Open University studies when one applies to regular university*. The interviews showed that Open University studies benefit an applicant both during the selection process itself and when preparing for it.

During the selection process the student had the advantage of, first, that at the Open University they had already taken examinations on one or more of the books set for the entrance examination, which made it considerably easier to prepare for the examination. Furthermore, during their Open University studies the student would have become familiar not only with writing answers to open-ended question but also with the terminology of the relevant discipline. These factors among others could help the student during the selection process, to say nothing of the bonus points for courses or modules already completed at the Open University.

Some of the same factors are operating when students report that previous university studies play a role in *their academic success with their later studies*. Regular university students in particular have gained advantage from previ-

ous university studies, in most cases pursued at the Open University. Thus, many OU students who later become full-time regular university students are already knowledgeable about the subject and master the relevant terminology and study techniques from their previous university studies. These have also enabled them to acquaint themselves with the nature of university studies and the action models and culture of the student community, another circumstance helping them to adapt to studying. Melin and Weckroth (1995) among others have similarly found that OU students who pursue a degree are better motivated than other groups of OU students. As these OU students saw it, their studies profited them particularly during preparation for university entrance examinations.

A very special way of making use of one's Open University studies during the student selection process is available in those Open Universities where it is possible to become a regular student in some cases without passing an entrance examination. Some universities have adopted this method in, for example mathematics and science subjects. The reason is that in some disciplines, such as in mathematics and the technological sciences, regular universities' student selection procedures have proven unable to find these fields enough students best suited for them. In such cases, certain studies at the Open University have either ensured the student a regular student place or given them an opportunity to take the entrance examination. (Puttonen 1995; Avoin yliopisto-opetus väylänä ... 1996; Raivio 1996.)

Access to Higher Education

The next section looks more closely at the routes through which the OU students have entered university to become regular students and the ways in which they have been able to make use of their previous Open University studies there.

Access to Regular University: The Open University Route vs. the Regular Route

As a rule, the OU students admitted to a regular university gained their student place through normal student selection, that is, 92.4 per cent of those

given a regular student place had applied for and gained their entry through the normal application process. Only 5 per cent of those admitted had entered via the Open University route, while a little less than 3 per cent had used both means of access, meeting the criteria set for those allowed to use the Open University route and then taking a specially arranged entrance examination. Naturally, the students who used this route in the early stage of the study were the oldest ones among the subjects. Now when the study has been brought to a conclusion six year after its start, students who have used the Open University route are evenly distributed among the different age groups, but the youngest entrants still favour the normal student selection process while the oldest age group of students between 29 and 31 has an above-average number of students who have entered a regular university via both the Open University route and an entrance examination. The greatest number of students who had gained access to regular university via the Open University route were found among those aged between 27 and 28 (Table 3).

Credits Earned Before Being Admitted to Regular University

Most (41.5%) of the OU students admitted as regular university students during the follow-up period had completed studies corresponding roughly to the subject studies of a single subject (in earlier terminology, they had finished the

Table 3. Access route to regular university studies by age cohort.

Access route	Age in 2000							
	22–26		27–28		29–31		Total	
	n	%	n	%	n	%	n	%
Normal student selection	117	95.9	109	91.6	58	86.6	284	92.2
Open University route without entrance examination	2	1.6	6	5.0	8	11.9	16	5.2
Open University route with entrance examination	3	2.5	4	3.4	1	1.5	8	2.6
Total	122	100.0	119	100.0	67	100.0	308	100.0

($\chi 2 = 9{,}851$; df = 4; $p < .05$)

cum laude or second level of the three levels of a Finnish subject syllabus, amounting to 25 credits or study weeks), a fourth had completed less than an approbatur (first level of a Finnish subject syllabus) block of courses, while another fourth had earned nearly 60 credits. Eight per cent had earned more than 60 credits, a third of these more than 100 credits. (Table 4.)

Table 4. Credits earned before being admitted to regular university by age cohort.

Credits	OU Students admitted as regular university students by age cohort in 2000							
	Aged 22–26		Aged 27–28		Aged 29–31		Total	
	n	%	n	%	n	%	N	%
0–14 credits	33	28.0	28	23.7	15	23.1	76	25.2
15–25 credits	60	50.8	45	38.1	20	30.8	125	41.5
26–59 credits	24	20.3	34	28.8	18	27.7	76	25.2
60 credits or more	1	0.8	11	9.3	12	18.5	24	8.0
Total	118	100.0	118	100.0	65	100.0	301	1000

($\chi^2 = 23{,}807$; df = 6, $p < .001$)

Interestingly, a comparison of the ***number of credits earned*** by an OU student at the stage when they enter a regular university using the various routes available (the normal student selection process or the Open University route either without or with an entrance examination), shows that even those gaining admission through the *normal student selection process* have already completed a fair amount of Open University studies. Nearly half of them had earner 15–25 credits, a fourth the already substantial number of 26–59 credits, a range whose upper limit approaches the minimum requirement of 60 credits to be met by those wishing to use the Open University route.

The Role of Previous Open University Studies in Substituting for Regular University Studies

Every other student was credited fully for their earlier studies at the Open University. In other words, full credit was not always given; more than a fourth of the students were credited only for a part of their studies while a fifth received no credits at all. (Table 5.)

Table 5. Credit transfer on entry to regular university.

Credit transfer	0–14 credits		15–25 credits		26–59 credits		60 credits or more		Total (n = 120)	
	n	%	n	%	n	%	n	%	n	%
Full	17	25.0	69	55.6	45	60.8	17	73.9	148	51.2
Partial	14	20.6	31	25.0	25	33.8	6	26.1	76	26.3
None	37	54.4	24	19.4	4	5.4	-	-	65	22.5
Total	68	100.0	124	100.0	74	100.0	23	100.0	289	100.0

($\chi^2 = 61{,}871$; df = 6; $p < .000$)

Earlier results showed that there were differences among study fields regarding credit transfer ($p < .05$). In education, full or partial credit transfer was more common, no credit transfer less common than the average. Social science students fared about the same: an above-average amount of their earlier studies substituted for their degree-programme studies. Above-average frequencies of no credit transfer were found in psychology, law, business administration, agriculture and forestry, degree programmes in technical subjects, and in art and design studies.

There were differences in credit transfer practices among both higher education institutions and subjects. In most cases, the reason why a student was not fully credited for studies in another university or sometimes given no credit at all lay in differences between universities in the relevant degree requirements. Practices vary from one university to another. Thus, different universities and even different faculties and departments within a single university apply different principles of credit transfer.

The Open University and the Future

A consideration of the entire follow-up materials indicated that the significance of the Open University became more clear as the students progressed with their studies. The initial phase of the research project foregrounded particularly *its role in gaining a degree and in influencing a student's social status*. In the following years the students placed more emphasis on the role played by the Open University in the pursuit for a degree than on other factors. The effect that their studies had on *career development and social status* was reinforced as their studies advanced.

The *study interests* of the under-25 OU students, that is, the reasons why they had taken up open university studies, were linked with their perceptions of the role of the Open University. Those students who emphasised *factors related to self-development* as what had motivated them to begin their studies grasped what the Open University meant to them while the research project was still in its early stages, deepening their insight as their studies went on. Thus, those who had entered the Open University to develop themselves or to test their abilities as a university student or who studied as a hobby or to make social contacts perceived the significance of the Open University from the outset.

However, the results indicate that some of them, those who began their studies motivated by more instrumental interests, linked with a *vocational or degree orientation*, arrived at an understanding of the significance of the Open University only after studying for a period of time – only after the second follow-up year, gaining more insight as the follow-up continued. Thus, to this group studying did not reveal its 'power' immediately but only later on. Those who grasped the role of the Open University early into their studies were what have been here termed 'knowers'. Knowers attended the Open University for a specific purpose, in most cases in pursuit either of a degree or of vocational further education.

Towards the end of the follow-up study, interests articulated at the start of the students' time at the open University had ceased to influence the way in which they perceived the significance of their studies.

131

Conclusions

In the last decade, the existence of the Open University has, in Finland as in other countries, been an important factor in responses to ever-increasing demand for university-level education. Considered from this particular perspective, the Open University can serve the higher education system in a great variety of ways. In fact, we may speak of how it can serve lifelong learning on the level of higher education. As a term lifelong learning covers a very broad field, but at its simplest it represents the aim of ensuring individuals educational opportunities throughout the whole of their life course. In this respect the potential of the Open University to promote lifelong learning is broad (Elinikäisen oppimisen komitea 1997; Bourgeois, Duke, Guyot & Merrill 1999; Knapper & Cropley 2000).

The Open University makes university-level instruction available to very different groups, even including groups previously excluded from traditional student populations. In Finland this has meant especially participation by middle-aged working adults who may not have had a chance to enter university in their youth, but today the Open University caters also for young people who may similarly have failed to secure themselves a student place through normal student selection or who wish to see what studying at university is like before committing themselves to regular university studies.

This phenomenon has been observed also elsewhere; in the UK, for example, the expansion of higher education provision has attracted many groups with little chance of admission during the earlier elitist system. (Furlong & Cartmel 1997; Williams 1997; Skilbeck & Connel 2000.) Accordingly, these groups previously underrepresented in higher education (the disabled, certain ethnic minorities, people from the lower socio-economic strata, young people and adults without the standard qualifications required for admission to higher education etc.) have been organised alternative routes to universities through special Access programmes. However, in the UK women or mature students are no longer considered special groups of this kind (Dodgson 2001; Haggis & Pouget 2001; Moore 2001). And as has recently been pointed out also in Finland (Korkeakoulujen arviointineuvosto 2001), attention should be paid to the educational guidance of the students. This is particularly important as regards special groups who have gained entry to universities

(Bekhradnia 2001).

The strategy for lifelong learning published in Finland in 1997 includes the statement that student selection procedures and instructional provision in universities should be developed with a view to making the Open University an equal route to university degrees (Elinikäisen oppimisen komitea 1997). Accordingly, there have been conscious efforts to make this a viable option ensuring that people who have demonstrated their studying abilities in the Open University can, if they wish, apply for admission as regular university students after having earned a minimum number of credits. To encourage the development of the Open University route the Ministry of Education has even included the number of entrants admitted through it among the indicators used in allocating public funds to universities.

Thus, Open University studies affect not only the students attending it but also higher education and social policy. The data described in the article reflects a view that emerged in the course of an examination of the life situations of young adults studying at the Open University. For them the Open University route is not a particularly relevant means of gaining access to a regular university, but it seems that Open University studies offer them special indirect advantages as regards their subject, personal abilities, the nature of university studies, the formation of a career perspective, and career development. According to the findings, studies at the Open University benefit most those who hope to be eventually accepted as regular university students. From this perspective, the Open University is serving today's massifying university institution well.

References

Avoin yliopisto-opetus väylänä korkeakoulututkintoon -työryhmän muistio (Memorandum of the Working Group on The Open University as a Route to a University Degree). 1996. Opetusministeriö. Työryhmien muistioita 7.

Bekhradnia, B. 2001. Performance indicators to widen participation. European Access Network News 4 (7), 6–7.

Bourgeois, E., Duke, C., Guyot, J.-L. & Merrill, B. 1999. The adult university. Society for Research into Higher Education (SRHE). Buckingham: Open University Press.

Daniel, J.S. 1995. Foreword. In F. Lockwood (ed.) Open and distance learning today. London: Routledge.

Daniel, J.S. 1997. Reflections of a scholar-gypsy. Paper presented at the conference on What kind of university? London 18–20 June 1997.

Dodgson, R. 2001. Widening access on a local, national and global level. Paper presented at the conference on Researching Widening Access: International Perspectives. Glasgow 29 June – 1 July 2001.

Elinikäisen oppimisen komitea. 1997. Oppimisen ilo. Kansallinen elinikäisen oppimisen strategia (Joy of learning. Strategy of lifelong learning). Komiteanmietintö 1997:14. Helsinki: Edita.

Furlong, A. & Cartmel, F. 1997. Young people and social change. Individualization and risk in late modernity. Buckingham: Open University Press.

Haggis, T. & Pouget, M. 2001. The complexity of youth: Reflections on a pilot access programme for 'young' learners. Paper presented at the conference on Researching Widening Access: International Perspectives. Glasgow 29 June – 1July 2001.

Harvey, L. & Knight, P.T. 1996. Transforming higher education. Buckingham: SRHE & Open University Press.

Houle, C.O. 1996. The design of education. San Francisco: Jossey-Bass.

Jöreskog, K.G. 1979. Statistical estimation of structural models in longitudinal-developmental investigations. In J.R. Nesselroade & P.B. Baltes (eds.) Longitudinal research in the study of behavior and development. New York: Academic Press, 303–374.

Jöreskog, K.G. & Sörbom, D. 1979. Advances in factor analysis and structural equation models. Cambridge: Abt Books.

Knapper, C.K. & Cropley, A.J. 2000. Lifelong learning in higher education. London: Kogan Page.

Kogan, M. & Hanney, S. 2000. Reforming higher education. Higher Education Policy Series 50. London and Philadelphia: Jessica Kingsley.

Korkeakoulujen arviointineuvosto. 2001. Opintojen ohjaus korkeakouluissa (Educational guidance in universities). Helsinki: Edita.

KOTA-tietokanta [Online database]. Opetusministeriö. Available: http://www.csc.fi/kota/kota.html/ [X Month 2001].

Melin, H. & Weckroth, K. 1995. TYT-opiskelun taustaa ja tulevaisuutta (Studying at the Institute for Extension Studies, University of Tampere: Background and future perspectives). Tampereen yliopisto. Täydennyskoulutuskeskuksen julkaisusarja A2.

Moore, E. 2001.Yliopistojen aikuiset opiskelijat (Adult students at university). Aikuiskasvatus 21 (1), 26–35.

Neal, S. 1998. The making of equal opportunities policies in universities. Buckingham: SRHE & Open University Press.

Nummenmaa, T., Konttinen, R., Kuusinen, J. & Leskinen, E. 1997. Tutkimusaineiston analyysi (Analysing research data). Porvoo: WSOY.

Piesanen, E. 1996. Avoin yliopisto nuoren aikuisen uranäkemyksen muotoutumisessa. (The role of the Open University in the development of young adults' career perspectives (in Finnish with English summary)). University of Jyväskylä. Institute for Educational Research Publication Series A. Research Reports 67.

Piesanen, E. 1997. Avoin yliopisto korkeakoululaitoksen kehityksessä (The Open University

in the development of the higher education system). In J. Välimaa (ed.) Korkeakoulutus kolmiossa. Näkökulmia korkeakoululaitoksen muutoksiin (Higher education within a triangle. Perspectives on changes in the highereducation system). Jyväskylän yliopisto: Koulutuksen tutkimuslaitos, 81–115.

Piesanen, E. 1998. A Finnish Open University as young adults' testing arena. Higher Education Management 10 (3), 137–151.

Piesanen, E. 1999a. Open University in Finland and the development of under-25 students' educational and working career (in Finnish with English summary). University of Jyväskylä. Institute for Educational Research. Occasional Papers 7.

Piesanen, E. 1999b. The Open University on the markets of an increasingly individualised society A bargaining chip in educational and labour market policies or an opportunity for the young adult? (in Finnish with English summary). University of Jyväskylä. Institute for Educational Research. Research Reports 8.

Piesanen, E. 2001. The Finnish summer universities: Educational equality and lifelong learning. In L. Thomas, M. Cooper & J. Quinn (ed.) Access to higher education: The unfinished business. Longton: European Access Network (EAN), 58–69.

Puttonen, H. 1995. Avoimen yliopiston monitahoiset motiivit. MALU-projektin lähtökohdat ja opiskelijatutkimus (The complex motives of the Open University. The starting points of the MALU project and the student report). Jyväskylän yliopisto. Avoin yliopisto. Tutkimuksia 1.

Raivio, J. 1996. Korkeakoulut harkitsevat avointa yliopistoa uudeksi vaihtoehdoksi opiskelijavalintoihin (Universities are considering the Open University as a new alternative form of student selection). Helsingin Sanomat 31.7.1996. Kotimaa.

Rumble, G. & Harry, K. (eds.) 1982. The distance teaching universities. London: Croom Helm.

Skilbeck, M. & Connel, H. 2000. Access and equity in higher education: An international perspective on issues and strategies. Dublin: Higher Education Authority (HEA).

Smith, A. & Webster, F. 1997. Changing ideas of the university. In A. Smith & F. Webster (eds.) The postmodern university? Contested visions of higher education in society. Buckingham: SRHE & Open University Press, 1–14.

Williams, J. (ed.) 1997. Negotiating access to higher education. The discourse of selectivity and equity. Buckingham: SRHE & Open University Press.

Yli-Luoma, P.V.J. 1996. Lisrel. Helsinki: IMDL.

Chapter 9

JUSSI VÄLIMAA & HANNU JALKANEN

Strategic Flow and Finnish Universities

The Aims of the Study

The main aim of this article is to discuss recent changes in decision-making and management in Finnish universities. In this context it should be noted that simply using the term 'management' indicates a radical break from a tradition where administration (*hallinto*) covered issues ranging from secretarial work to the decisions made by the rector and senate of a university.[1] It is no exaggeration to say that before the 1980s Finnish higher education lacked both the term management and a managerial approach to university administration. During and after this decade, one of the aims of Finnish higher education policy has been both to give more power to university leaders (heads of departments, deans and rectors) and to create more flexible decision-making structures within higher education institutions. These changes were articulated and set down in the new Universities Act (1997), which has significantly increased institutional autonomy and opened up opportunities to reform institutional decision-making processes and structures.

According to Kogan (1998), "moving from control to even limited autonomy requiresuniversities to develop their own organisation and take new ways of thinking and working". In this article we shall analyse what has happened in Finnish universities when they have had an opportunity to look for those

[1] Even today there is no proper Finnish translation of the concept management. The words lead, leader and leadership (*johtaminen*) come closest.

186

new ways of thinking and working. We shall also ask: how do the structures and dynamics of decision-making change when higher education institutions have autonomy to determine their internal decision-making procedures?[2]

Our study is based on official documents, unprinted memos and Internet documents and supported by research literature and personal experiences gained in the governing bodies of the University of Jyväskylä. Methodologically we would like to refer to Ellis and Bochner (1996), who have developed a methodology of autoethnographic research where researchers draw on their own experiences as a source of information. Another important model is Creswell (1998), helpful in emphasising the importance of research design in qualitative research.

Changes in National Steering Instruments and the New Universities Act

As a result of changes in the national steering of higher education in Finland, the management of higher education institutions is becoming an important topic in Finnish universities. According to the official picture presented by the Ministry of Education, the universities' administration and decision-making systems have been "streamlined byreducing the number of levels and by delegating authority" during the 1990s (Ministry of Education 1996). The trend of the 1990s was to increase the power of rectors, deans and heads of departments at the expense of collegial bodies. In addition, the dynamics of the higher education system altered with the introduction of the new steering ideology called management by results in the 1980s. The goal of management by results has been to reward performance and effectiveness (Ministry of Education 1996;1998). According to the Ministry of Education, "The principle underlying management by results is that the objectives set for institutional activities and the resources needed for their implementation are determined in negotiations between the Ministry of Education and each university" (Ministry of Education 2001). On the basis of these negotiations, every university

[2] In this article, universities are synonymous with higher education institutions because the Universities Act regulates only the functioning of universities. Polytechnics are not regarded as universities.

signs a performance agreement which defines the university's objectives and the resources it has managed to secure.[3] Management by results has been developed towards transparency and predictability. According to the interpretation put forward by the Ministry of Education, these principles may be expressed in the form of a funding formula (Table 1.). As laid down in the official policy discourse, "this formula will be developed for core funding based on a clear interlinkage of the targets set for the university system and financing". In practice, this means that public funding for Finnish universities depends mainly (76%) on the number of completed master's degrees (46%) and doctorates (30%). Universities' infrastructure is allocated 19 per cent of the total while 5 per cent is reserved for "earmarked core funding"(graduate schools 4%, Open University 1%) (Ministry of Education 2001). The problem with this funding formula is that it does not pay attention to the fact that in 1999,

Table 1. The funding formula for Finnish universities.

CORE FUNDING					
FREE CALCULATED CORE FUNDING (95 %)				*EARMARKED CORE FUNDING (5 %)*	
Extent factor (19%)		*Funding based on number of degrees (76%)*		*Graduate schools (4%)*	*Open university (1%)*
Salary costs (14%)	*Premise costs (5%)*	*Master's degrees (46%)*	*Doctorates (30%)*		
		- targets 2/3 - realised 1/3	- targets 2/3 - realised 1/3		- targets 2/3 - realised 1/3

[3] Finnish universities receive their financing as a block grant (or lump sum) to be used at their own discretion (Ministry of Education 2001). One of the new steering instruments intended to promote research of high quality is a policy of national "centres of excellence". This involves the Ministry of Education rewarding high-quality research and teaching units through bonus funding on the basis of evaluation findings.

for example, the Ministry of Education covered only 65 per cent of the universities' total costs (Välimaa 2001). This means that higher education institutions need external funding to fulfill the requirements set by the Ministry of Education. This state of things reinforces a tendency to control and plan the use of institutional resources without taking into account the origin of the funding.

The allocation of resources within individual institutions repeats the national model. Thus, every university assigns its resources in and through institutional negotiations run according to the principles of management by results. Normally the university is represented by the rector assisted by the senior administrative officials (director of administration, financial manager and personnel manager), who meet their 'opponents', the university's faculties and separate institutions, one by one. These institutional negotiations result in performance agreements in which each faculty (and institution) engages to produce a certain number of degrees, receiving in return an appropriate sum of money. What represents "an appropriate sum of money" is a matter of bargaining and political debate.

We realise that the Finnish case is not a unique one in Europe, where governments have during the last decade or so emphasised the use of economic incentives. It could be said that the power of the purse has been strengthened at the cost of former steering through legislation. The evaluative state itself, firm in its ideological belief in the blessings of deregulation and market forces, has been persuaded that together these two will stimulate institutions more powerfully to innovate and find themselves a specific niche on a more competitive higher education market. This emergence of a more competitive environment within national higher education systems has been described using the term marketisation (see Bargh, Scott, Smith 1996). Recent changes can be approached also from the perspectives opened by the concept of New Public Management (see chapter 2 in this book) (Pollit 1995). This policy principle is evident in Finland in the new Universities Act (1997), which gives universities internal autonomy in all important matters. Therefore, the preparation of the Universities Act and its implementation must be analysed in more detail in order to understand the nature of recent changes in decision-making and management in Finnish universities.

The Preparation and Contents of the Universities Act

Traditionally, the legislation process in Finland has three main phases. First comes the preparation of a bill in the ministry responsible for it. Normally this preparation process results in a document which contains a preamble and the government bill proper. The preamble explains the rationale behind the proposed act. In the second phase the government bill and its preamble are sent to every actor assigned with preparing a statement about the law proposal. In the case of the Universities Act, these parties (or social actors) comprised all Finnish higher education institutions and academic trade unions. The responsible ministry is also expected to pay attention to the feedback from the field. The third phase of the process is the passing of the bill by the Finnish Parliament. Normally the Parliament enacts laws without making radical changes to the original government bill.

The Government Bill and Its Preamble

An analysis of the bill's preamble shows that from the legislator's point of view, one of the main objectives was to unify various earlier acts and decrees into a single law. That is, the expansion of the Finnish higher education system from the 1960s to the 1990s had produced 20 different acts, one for each university, together with a number of decrees (and statutes and government resolutions).

The main principle of the Universities Act was to secure and even broaden the universities' autonomy. This goal amounted, however, more or less to the confirmation of existing practices. The preamble gives no exact definition of the content of this autonomy even though traditionally academic autonomy has been defined in terms of research and teaching. In addition, the legislator also wanted to give universities power to determine their own decision-making structures. At the same time, however, the legislator expected higher education institutions to develop their institutional decision-making structures by applying institutional self-regulation instead of following the previous practice based on (national) decrees. The legislator was also interested in reducing the number of administrative levels within higher education institutions.

Another perspective on the functioning of higher education institutions was the assumption that institutional decision-making requires cooperation

between various groups within the universities. Accordingly, it was stated in the government bill that universities' governing bodies should consist of representatives of professors, other academic staff (other university teachers and researchers) and the students.

The legislator was further concerned to boost interaction between universities and society. It was therefore suggested that university senates might include members from outside academic communities (from business enterprises and other stakeholders). The aim was also to create opportunities for more managerial leadership in universities by stating that a university could elect a rector who was not a member of its staff as long as the candidate held a PhD. The government bill was also intended to promote cooperation and division of work among the Finnish universities even if there was no detailed definition of the precise forms of cooperation envisaged. (Saarnivuo & Muttilainen 2000).

The Reactions of the Universities

The responses of the universities to the government bill varied a great deal. Generally speaking, all Finnish universities adopted a positive attitude towards the new act. The universities supported the idea of increased institutional autonomy even though some of them noted that the act was intended to sanction recent developments rather than open up new avenues of opportunity. It seems, however, that it was those universities which were facing the most radical changes or in danger of losing their social status that were most dubious about the act, whereas universities which had already reformed their decision-making structures responded more positively. Quite a number of universities, however, saw it as a problem that there were no precise regulations on the proportions in which the various groups within universities were to be represented in decision-making bodies. This was obviously one of the reasons why the final Universities Act specified the number of representatives from each of these groups (Saarnivuo & Muttilainen 2000).

As regards the members of the university senate (and of the other governing bodies), those universities which have traditionally had good relations with business (such as schools of business administration and universities of technology) took the most positive view of the new opportunities, whereas multidisciplinary universities were not enthusiastic about the suggestion to

include representatives of outside interests. All of the universities also considered it a bad idea to appoint a rector from outside the university world. (Saarnivuo & Muttilainen 2000.)

The Contents of the Universities Act

The Universities Act was passed by the Finnish Parliament in 1997, coming into force on 1 August 1998. By nature, the Universities Act is a skeleton law covering all Finnish universities and containing also some general and binding regulations. First the act states that all universities should have a rector and a university senate, which is the highest decision-making body in a Finnish university. The university senate consists of representatives of professors, other teachers and researchers, and the students. It is laid down that no single group may have representation exceeding half the total membership of the given governing body. The University Act goes on to state that up to a third of the members of a university senate may be representatives of groups other than university staff or the students (that is, representatives of stakeholders and partner organisations). Further, universities comprise faculties and other (basic) units, and such units should have multi-member decision-making bodies. The administration of the faculties is the responsibility of deans and faculty councils.[4] Each university should also have an electoral commission, which votes in the rector of the university (and also the chancellor if the university has one).

The Universities Act lists the main duties of the rector and the university senate. The university senate is to:

1) approve general plans concerning the university's financial and other important affairs;
2) determine the principles on which resources will be allocated;
3) make statements about important matters concerning universities;
4) approve internal rules about decision-making within the university (university regulations) and about other important issues.

---

[4] Faculties are administrative units consisting of several academic departments. Faculties and faculty councils are headed by a dean who is elected from among the professors. Traditionally, faculties have conferred degrees and appointed short-term academic staff.

The Universities Act ordains that the rector leads (or manages) the operations of the university and deals with and decides on matters involved in the university's overall management unless otherwise stated. Further, the Universities Act prescribes that the rector's term of office is five years and that they are appointed by the electoral commission. Furthermore, as was already mentioned, a rector may be elected from outside the university if they have a PhD or have been nominated as a professor in a Finnish university. Each university is allowed to decide how many vice-rectors it appoints.

When looking at the Universities Act from the perspective of institutional management, the most important change is the principle that universities are granted internal autonomy in all important matters. These include the right to allocate their internal resources independently of the Ministry of Education, the right to establish their own institutional regulations and decision-making procedures, and the right to appoint professors and other academic staff. These are significant changes in a public higher education system rooted in the traditions of the continental model because now the universities have real scope for developing institutional policy-making.

Analysing the Implementation of the Universities Act in Finnish Universities

In the following sections we shall analyse how Finnish universities have used their new opportunities.

Initial empirical impressions suggest that no obvious radical changes have taken place after the Universities Act was put into effect. This is probably related to the fact that the act gave legal sanction to existing arrangements. By the time the new act came into force, many Finnish universities had already altered their decision-making structures. It is also difficult to determine exactly which changes were caused by the Universities Act as such. There seems to be, however, some common trends. First, it is evident that the universities have made use of the opportunity to reform or reorganise their structures. Faculties have been merged and new ones created in those universities where there has been a real need for reorganisation.[5] Before the Universities Act such changes would have been decided by the government, and the legal process would have been much more difficult. Furthermore, while as many as

50 per cent of Finnish higher education institutions report that they have reformed their central administration, it is probable that they would have done so in any case.[6]

Apart from the nature of the reorganisations undertaken by them, Finnish universities are distinguished also by their attitude towards representatives of stakeholders sitting in the university senate. Half of them have refused stakeholders' representatives entry to their senates even though practically all have allowed them to be represented in the department-level decision-making bodies. A reasonable explanation emerges from the context of the activities of these assemblies: the governing board of a separate institute or university department may benefit from the participation of their stakeholders, whereas on the level of a university as a whole it is much harder to identify well-defined stakeholders. It is interesting to note that only five Finnish universities[7] out of the ten allowed to include representatives of stakeholders in their senates[8] have in fact done so. One of them is a multidisciplinary university, two are technical universities, one is a business school while the last one is the Academy of Fine Arts.[9] (Saarnivuo & Muttilainen 2000.)

The strength of academic traditions is shown by the fact that no Finnish university has elected an outsider rector.

---

[5] As has been done in the University of Jyväskylä and the University of Oulu. In the University of Art and Design Helsinki one department has been turned into a faculty.

[6] The reformers are the Universities of Joensuu, Lapland, Oulu, Tampere, Turku, Vaasa; the Helsinki and Turku Schools of Economics and Business Administration; the Sibelius Academy and Helsinki University of Technology.

[7] The institutions in question are the University of Joensuu, the Swedish School of Economics and Business Administration, Helsinki University of Technology, Tampere University of Technology, the University of Art and Design Helsinki.

[8] These are the Universities of Kuopio, Joensuu, Lapland, Åbo Akademi University; Tampere and Helsinki Universities of Technology; the Swedish School of Economics and Business Administration; the Academy of Fine Arts, the University of Art and Design Helsinki, the Sibelius Academy.

[9] It should be also added that it was possible to elect such outsiders even before the new act.

Decision-Making in Finnish Universities: The Nature of the Changes

In addition to analysing changes in the university senates we need to take a close look at current ways of thinking and how they have been articulated in university regulations. In the following section we shall first consider general trends in Finland and then offer a more detailed discussion of the case of the University of Jyväskylä, analysing the significance of the change processes.

All Finnish universities have formulated internal rules of administration and management (university regulations) which govern the functioning of the administrative structures of university institutions, setting down how many members different decision-making bodies are to have and specifying their tasks and duties. University regulations also define the principles underlying teaching, student intake and progression, and curricula. These regulations also express the universities' understanding of the balance of power among and the tasks of the different actors (rector, university senate, faculties, administrative officials) operating within the university. University regulations also control the use of power by the rectors, the university senate and the university's administrative officials. In most such internal rules, there is a general trend towards strengthening the power of the rector (Saarnivuo & Muttilainen 2000).

Following national regulations, these internal policy papers also seek to define and interpret the implications of the expectation that university senates are to become more strategy-oriented bodies and establish guidelines for general policy goals and long-term planning. Normally this has been understood to mean that the university senate approves the yearly action and financial plan but does not monitor its implementation in detail. The rector, assisted by the university's central administration, is assumed to lead the operations of the university. Because of this new more active role, rectors have also the power to decide independently how to use a part of the money not allocated for a specific purpose during the institutional negotiations that are an aspect of management by results. All these changes mean that the university senate has a more prominent strategic role while the rector wields increased executive powers.

The important thing about the new situation created by the Universities Act is the fact that university senates are now more easily able to alter the rules governing their universities than before, when all changes were decided

by the Ministry of Education. Revising the internal rules is becoming a routine activity repeated whenever it is desirable and there is a political will to do so. This may result in more flexible responses to changing needs and expectations.

The Case of the University of Jyväskylä

We shall analyse recent changes in more detail on the basis of the case of the University of Jyväskylä. The University of Jyväskylä is a medium-sized Finnish university, originally established in the 1860s as a teacher training seminar. Gradually it developed into a three-year institution (becoming Jyväskylä College of Education in the 1930s) and was finally created a multidisciplinary institution in the 1960s. Until the late 1990s the University of Jyväskylä had five faculties (Education, Humanities, Science, Social Sciences, and Sport and Health Sciences). Two new faculties were constituted after the Universities Act, a Faculty of Information Technology and a School of Business and Economics (see Välimaa 1999; 2000). Student numbers grew rapidly during the 1990s, rising from 8 000 to 13 000.

The internal regulations of the University of Jyväskylä supplement the guidelines and regulations given in the Universities Act. In other words, the university regulations interpret national principles so as to adjust them to local contexts. Before the new act all these regulations were prepared in the Ministry of Education and approved by the government. Following the principles of the national law, the university has a senate, a rector and two vice-rectors. The university regulations define the membership of the university more precisely (university teachers, researchers, other staff and students) and specifies its faculties and administrative bodies. The university regulations also provide a detailed description of the responsibilities of the different decision-making bodies, faculties, departments, separate institutes and university central administration. These regulations were approved by the University Senate in 1998 (Jyväskylän yliopisto 1998). The aim is to make clear rules for the game, but nowhere is it said what is the name of the game. Therefore, we shall need to shift our perspective and reflect on the relevant activities from inside the decision-making bodies themselves.[10]

One of the most important objectives of the Universities Act is to strengthen institutional autonomy and enable institutional decision-making procedures

to be revised as flexibly as possible. The new act also assumes that the university senate will decide on the guidelines for the operations and activities of the university and that the rector will direct the implementation of its decisions. It may also be said that the university senate is expected to assume a strategic role within the university. In addition to these external pressures, the strategic expectations are reinforced by changes in the social and economic operational environment of higher education institutions (see chapter 2 in this book). That is, increased autonomy and the abolition of the traditional central steering of national higher education has forced universities to evaluate their activities (this is also one of the requirements of the Universities Act, but nevertheless universities feel that they are under pressure to evaluate), at the same time as they must also coordinate their institutional activities. Evaluation is one of the tools of such operational coordination. In this situation the University of Jyväskylä – like many other higher education institutions in Finland – sees strategic management and strategic planning (see Mintzberg 1987) as managerial tools (Malkki 1999). In the context of universities, strategic activities are intended to enable institutions to retain control in a situation where both social and economic environments have become increasingly unpredictable. Strategic thinking – whether manifested as a strategic plan, ploy, pattern, position or perspective – helps sustain an institution's operational capability.

However, there is the problem, stemming from the academic context, that the University of Jyväskylä has strong collegial traditions, as was noted by external evaluators in the beginning of the 1990s (Kogan et al. 1993). In addition to traditional definitions of collegiality (Birnbaum 1988), in Finnish decision-making the concept may have a specialflavour of its own. It seems that in Finland there is a tendency to understand *collegiality* as *academic immunity*, especially in the context of the university senate, where each faculty and the other interest groups (professors, other teachers) are potentially competing for the same resources. In the University of Jyväskylä this situation is aggravated by the fact that the deans of the faculties are appointed from among the

[10] The authors sit in institutional decision-making bodies. Mr Hannu Jalkanen is a member of the University Senate and Dr Jussi Välimaa a member of the Executive Board of the Institute for Educational Research.

professors. In this situation, the deans may find it advantageous to pay more attention to defending the interests of their faculties than to acting as representatives of the professors. Under such conditions, collegiality may turn into the principle of "We won't meddle in your internal affairs if you don't meddle in ours", internal affairs meaning here questions of quality and efficiency. Furthermore, depending on the issues this attitude may mean that everybody is preoccupied with trying to preserve the balance of power and ensure an equal division of resources among the different faculties.

It seems, therefore, that a university senate is not by nature a strategically oriented body but, rather, a body whose aim is to maintain an equal division of resources and an existing balance of power. It tends to act as a parliament instead of taking on the role of a government. In addition, there are various perceptions of the idea of university and of the strategic role that the university senate should have in a university. According to one study (Malkki 1999), it is possible to identify, in four Finnish universities, of which the University of Jyväskylä is one, three distinct groups of academics among the members of university senates as regards their definitions of the university ideal. The first group of academics may be characterised as supporters of a "business university". These are academics who define university in terms of a corporate enterprise, which should be managed efficiently. Their opponents, a group of traditional academics, consists of senate members who, upholding the traditional functions of university, see it as a promoter of civilised life and humanistic ideals. Malkki calls them supporters of the "Humboldtian ideal of university" (that is, of *sivistysyliopisto*, from the German *Bildungsuniversität*, a university based on the principles of the liberal arts). An intermediate mixed group comprise senate members who see an alternative between these two extremes. (Malkki 1999.)

Institutional management is also facing new challenges related to the national steering instruments. These challenges stem from the fact that the national steering instruments emphasise quantitative criteria (especially the number of completed degrees), whereas institutional steering should be based on qualitative criteria (quality of research, quality of teaching) because the reputation of a higher education institution depends on the standard of its "products" (academic degrees and research findings). This contradiction affects institutional decision-making because the university senate should be able to lay down the principles guiding the allocation of resources on the basis

of institutional strengths and weaknesses but must do this in a context where funding depends mainly on production indicators. These issues are linked also with institutional self-regulation, which may be grounded on the instruments of management by results and on allocations made according to the quality of academic products. These are important considerations in a more marketised environment of higher education where an institution's reputation rests on the standard of its products. In this case also, reputation is the currency of the academic world.

Taken together, the growing power of the rectors, the various strategic expectations directed at the university senate, and the unpredictable social situation where universities must plan their activities, suggest that the phase where decisions are prepared is becoming increasingly important. The responsibility for preparing decisions lies with the university's administrative officials and – especially in important matters – with the rector. These processes seem to strengthen the position of administrative officials and those academics participating in them. The picture should not, however, be described as a zero-sum game with a sharp distinction between losers and winners. Despite the fact that each interest group is trying to maximise its power, it seems that in practice the process of preparing decisions is more about optimising the balance of power. In this sense, the situation also challenges institutions to develop their cooperation skills.

Strategic Flow and Universities?

On the basis of our findings it seems obvious that the new Universities Act has strengthened Finnish universities' institutional field of social action (see Bleiklie et al. 2000). The new act has decentralised decision-making at the system level at the same time as it has devolved political decision-making processes (and the political game) to the local, institutional level. This may be seen from the internal regulations of different higher education institutions which display local variations despite being based on national principles. For two reasons,the Universities Act has also promoted strategic thinking in higher education institutions. First, in an unpredictable social environment strategic (management and) planning is seen as a crucial planning instrument, enabling an institution to keep the situation under control and helping it to

adapt to its changing operational environment. Secondly, strategic planning is perceived as an instrument of institutional management. In these frameworks of action, the university senate is seen as a crucial strategic body in the formulation of strategic plans while university administration is a tool for implementing these strategic plans, even though there are various conceptions of university and of strategic planning. Despite differences in their internal regulations, all Finnish universities are moving towards strategic thinking. Indeed, it seems that there is a strong 'strategic flow' shaping the self-definitions and, perhaps, even identities of Finnish universities.[11]

This phenomenon should be approached also from historical perspectives. That is, it seems that the crucial concepts of academic and institutional autonomy are being redefined in the strategic flow. In the traditional university, autonomy involved the academic activities of teaching and research, whereas the present definition is increasingly associated with institutional autonomy. Another important conceptual challenge is posed by the national steering instruments. Even though institutions are given a lump sum by the Ministry of Education, this lump sum is granted on the basis of negotiations conducted in accordance with the principles of management by results. These negotiations make it possible for the Ministry of Education to influence the contents of the academic work carried out within higher education institutions. The same influence is brought to bear through institutional steering mechanisms. For such reasons, these social contexts of steering have potential to challenge the traditional perceptions of academic work. Autonomy in research and teaching used to be the hard core of traditional Humboldtian universities, whereas in the new strategic university they are subject to institutional policy-making processes and negotiations.

[11] On the concept 'flow' see chapter 3 in this book.

200

References

Unprinted documents:

Jyväskylän yliopisto. 1998. Jyväskylän yliopiston hallintojohtosääntö (Regulations of the University of Jyväskylä). Jyväskylän yliopisto. Hallitus. 26.8.1998.

Ministry of Education. 2001. Management by results in higher education [Online pdf file]. Ministry of Education. Available: www.minedu.fi/julkaisut/pdf/opm84.pdf.

Saarnivuo, J. & Muttilainen, O. 2000. Raportti yliopistolain tavoitteiden toteutumisesta yliopistojen sisäisissä määräyksissä (A report on the implementation of the objectives of the Universities Act in the internal regulations of universities). Ministry of Education. Available: http://www.minedu.fi/julkaisut/muut_julkaisut_aiheittain.html.

Literature:

Bargh, C., Scott, P. & Smith, D. 1996. Governing universities. Changing the culture? Bury St Edmunds: SRHE & Open University Press.

Birnbaum, R. 1988. How colleges work? The cybernetics of academic organization and leadership. San Francisco: Jossey-Bass.

Bleiklie, I., Hostaker, R. & Vabo, A. 2000. Policy and practice in higher education. Reforming Norwegian universities. Higher Education Policy Series 49. London & Philadelphia: Jessica Kingsley.

Creswell, J.W. 1998. Qualitative inquiry and research design. Choosing among five traditions. Thousand Oaks, CA, London & New Delhi: Sage.

Ellis, C. & Bochner, A. 1996. Composing ethnography: Alternative forms of qualitative writing. Thousand Oaks, CA, London & New Delhi: Sage.

Ministry of Education. 1996. Higher education policy in Finland. Helsinki: Ministry of Education.

Ministry of Education.1998. Higher education policy in Finland. Helsinki: Ministry of Education.

Ministry of Education. 2001. Higher education policy in Finland. Helsinki: Ministry of Education.

Kogan, M., Allardt, E., Kirkwood, R., Praestgaard, E. & Teichler, U. 1993. Evaluation of the University of Jyväskylä. Report of the external visiting group. Helsinki: Ministry of Education. Department for Education and Science Policy´s Series of Publications 9.

Kogan, M. 1998. University-state relations: A comparative perspective. Higher Education Management 10 (2), 121–135.

Kogan, M & Hanney, S. 2000. Reforming higher education. Higher Education Policy Series 50. London & Philadelphia: Jessica Kingsley.

Malkki, P. 1999. Strategia-ajattelu yliopiston johtamisessa. (Strategic thinking in university-management). Kuopio University Publications E. Social Sciences 75.

Mintzberg, H. 1987. The strategy concept I: Five Ps for strategy. California Management Review 30 (1), 11–24.

Pollit, C. 1995. Justification by works or by faith? Evaluating the New Public Management. Evaluation 1, 2, 133–154.

Välimaa, J. 1998. Managing a diverse system of higher education. In M. Henkel & B. Little (eds.) Changing relationships between higher education and the state. London & Philadelphia: Jessica Kingsley, 23–41.

Välimaa, J. 1999. Taloustieteellisen osaston arviointi kevätlukukaudella 1999 (The evaluation of the department of economics during the spring term 1999). Institute for Educational Research. Working Papers 10.

Välimaa, J. 2000. Globalization in higher education: Actions and reactions. The case of Finland. Paper presented at the EAIR Annual Meeting. Berlin 6-9, September, 2000.

Välimaa, J. 2001. The changing nature of academic employment in Finnish higher education. In J. Enders (ed.) Academic staff in Europe: Changing contexts and conditions. Westport, CT: Greenwood, 67–90.

Yliopistolaki (Universities Act). L 654/1997. Hallituksen esitys Eduskunnalle yliopistolaiksi ja laiksi yliopistolain toimeenpanosta (Government bill concerning a proposed Universities Act and an Act concerning the Implementation of the Universities Act). HE 263/1996.

Chapter 10

JUSSI VÄLIMAA, HELENA AITTOLA, SANNA HONKIMÄKI, HANNU JALKANEN, EEVA KALLIO, PENTTI MÄÄTTÄ, ELLEN PIESANEN

Discussion: Finnish Higher Education Faces Massification and Globalisation

We shall begin the concluding chapter of our book by analysing the uses of the concept of massification of higher education, going on to sum up the central themes considered in the book's articles with a view to opening perspectives on the changes taking place in Finnish higher education. This section will be followed by a discussion of future trends in higher education and of higher education research in Finland. In this context the concept of globalisation seems to offer seminal vantage points.[1]

[1] While describing the main contents of the book we should also say a word about what will not be found there. It does not discuss changes taking place inside Finnish polytechnics. This exclusion does not mean that the topic would be without interest. Quite the contrary, it is an interesting subject that will become an even more interesting one even though we have not had the resources to examine it in this book.

203

Perspectives on Massification as a Concept and a Social Phenomenon

From Mass Towards Universal Higher Education

The massification of Finnish higher education is a fact no matter what indicators may be used to assess the situation. Student enrolment (over 50 per cent of the age cohort) makes it more than clear that Finnish higher education is a mass system. The number of higher education institutions (20 universities and 31 polytechnics) means that there is a tertiary institution for every 100 000 inhabitants. Further, an impressive number of municipalities (196) have Open University facilities. And when we add up all the municipalities where there can be found either a university (53 municipalities), a polytechnic (88 municipalities) or an Open University unit (196 municipalities), we see that there is some sort of higher education institution – with either teaching or research functions – operating in 61.6 per cent of all Finnish municipalities (276 municipalities with higher education institutions or facilities out of a total of 448 municipalities existing in Finland in 2001) (see Figure 1, p. 30). Finland has indeed entered the phase of mass higher education, or even that of universal higher education.

As our discussions in this book have shown, this process of massification has many meanings and consequences. It seems obvious that in addition to being a concept used by researchers analysing higher education, the word massification has begun to live a life of its own.

Massification as a Metaphor

Following Martin Trow's definition, we can see that originally 'massification' has been used as a sociological concept to describe changes in the social dynamics of higher education when the number of students entering universities exceeds a certain figure. That is, the increase in student numbers alters not only the functioning of higher education institutions but also the social role of higher education. Appropriately, the sociological use of the concept focuses attention on this shift in the social function of the higher education system: it describes a move from an elite to a mass system of higher education, in which the role played by higher education in social reproduction is different. (Trow 1974;

204

Ahola 1995.) According to Trow, elite higher systems reproduce the elite of a society, whereas the main social functions of a massified higher education system are the reproduction of qualifications and the selection of students.

Another aspect of the massification of higher education that should be kept in mind is that it refers to many linguistic contexts and academic traditions. According to Peter Scott (1995), the process should not be understood merely in a mechanical sense as a description of growth in the numbers of students, academic staff and higher education institutions but, in a cultural sense, as a series of multiple modernisations (Scott 1995). The key components of massification are not only the expansion of the system but also institutional diversity, organisational complexity and academic heterogeneity (Bargh et al. 1996). Therefore, the crucial aspect of the massification process is a fundamental transformation of the social dynamics of tertiary systems.

We would like to propose that on the basis of Finnish experience, there are many uses of the word massification. In Finnish academic discourses massification is often employed as synonymous with problems encountered in organising one's teaching and working hours. The findings of Kallio's study of the assessment of university teaching in a provincial Finnish university suggest that it is possible to use the phrase 'experiential massification' to describe the difficult situation of university teachers. It is obvious that they are indeed suffering from a great deal of stress because of the pressure of their work. This phenomenon might be called experiential teaching-related stress. 'Massification' could then be used as an explanatory variable for this subjectively experienced stress among teachers. Both as *a word and a metaphor* massification has negative connotations in Finnish academic discourses.

However, from an international perspective one may ask whether the Finnish system of higher education is massified in the first place. For example, compared to most European and other higher education systems Finnish universities – except for the University of Helsinki – and polytechnics are smallish institutions with manageable and convenient student-teacher ratios (see chapters 2 and 3).[2] Nevertheless, this is not how the situation is seen in Finland.

---

[2] In 1999, multidisciplinary universities had an average enrolment of 7 596 students (varying from 3 300 to 36 000 students) while the student-teacher ratio was 20.9. In Finnish polytechnics, enrolments averaged 3 113 students in permanent institutions, ranging between 1 194 and 5 496 students per individual institution (see the KOTA and AMKOTA data bases).

205

The Finnish meaning of the concept of massification as presented in the book (see chapters 2 and 4) seems to indicate that any understanding of the concept is bound up with the given national contexts. Thus, the way in which the term is used in Finland also suggests that as a metaphor massification is a relational concept: it describes local changes and changes in the work of academic teachers not only changes in the functioning of national higher education systems.

Perspectives on Massification in Finnish Higher Education

The consequences of the massification process have been another focus of our studies. One of the main reasons behind this particular cognitive interest is the fact that the massification of higher education has transformed not only the social role of higher education provision but also the social dynamics within the institutions delivering higher education. In this book we have analysed the practical implications that this transformation has for students, university teachers and doctors and doctoral students. We shall continue the summary of our result by considering the hard core of academe, doctors working in universities.

A Massification of Doctoral Training?

There has been a major effort in Finland during the last decades both to increase the number of holders of doctoral degrees and to improve the quality and organisation of the doctoral training process itself. Basically, the political target has been to enhance the country´s scientific and economic competitiveness in an internationalising world. Higher education, researcher training and research activities have been considered important elements in the new strategy of national survival. Graduate schools were brought in as one tool for pursuing these objectives.

The policy has been successful, as Pentti Määttä's article shows. The statistics indicate continuously growing numbers of new doctors, and the graduate schools have got off to a good start. Internationally, Finland has achieved a fairly respectable position in the rankings of nations if only numbers are taken

into account. Moreover, almost half the growth in 1990s has taken place in fields which have formed the nucleus of Finnish science and higher education policy, that is technology and allied research fields. In the last years of 1990s the graduate schools made a certain contribution to this development, although the deeper roots of the changes are traceable to the mid-eighties.

As Määttä notes, a remarkable feature in the massification development of Finnish doctoral training is the growing share of women in the degrees awarded, today reaching some 45 per cent. Research funding of the eighties and the nineties focused, however, primarily on 'useful', male-dominated fields; similarly, much of the increase in the student intake has occurred in these study fields. It seems that this paradox stems from a process where a relative shortage of men has led to an increasing proportion of female undergraduates in many other fields, most notably in medicine, where it is quite common to continue one's studies up to the doctoral degree. This situation and the general effort to raise the number of PhDs/MDs has then resulted in more female doctors both in these study fields and in general. The graduate schools have contributed to this development.

In spite of the rising numbers of holders of doctoral degrees and the economic depression of the early nineties, doctors' labour market situation has remained fairly good. At its height the unemployment percentage among them was about two, only half of that among those with a master´s degree. On the one hand, this is probably because many of the new doctors already had a job when they were studying for their degree. On the other hand, although the universities remain the chief employers of even new doctors, accounting for some 40 percent of doctoral employment, the proportion of PhDs/MDs working in the research sector has been growing rapidly. Employment by the research sector may, however, depend mainly on public research funding, for it seems that in the private sector the relevant labour markets are still restricted primarily to certain fields and to the larger firms (Välimaa 1998).

The massification of doctoral education has, of course, been noticed also within the universities. Helena Aittola examined the nature of the changes that have taken place in the attitudes of academics towards universities as analysed through generational lenses. According to her study, the growing numbers of students and limited financial resources are the most obvious indications of a mass university affecting the everyday life of academic staff. Pressures for increased productivity both in teaching and in research activi-

207

ties are making academic work very taxing. In addition, these demands for greater efficiency go hand in hand with the use of assessment and control instruments.

The doctors studied by Aittola stressed that there is now too little time to perform all one's duties properly. Feelings of academic inadequacy affect the identity of academic people as they realise themselves and act out their academic identity by conducting research, producing new knowledge and teaching new generations of students wholly on their own. If, as they attempt to carry out these duties, they are seriously impeded by external pressures and restrictions, this not only impairs their working conditions but also undermines their academic identity. Aittola observes that as a consequence of shifts in higher education policy and of administrative reforms carried out in the Finnish higher education system, the administrative aspects of academic professions have become more central.

Aittola has also observed that ranking disciplines has become commonplace in today's Finnish universities. Continuous evaluation of academic activity tends to create a climate of competition and tension. It is not, however, possible to eliminate this contest because resources are allocated on the basis of evaluations of results. Research funding policies vary in different countries according to economic conditions in each society and varying science policy interests. The doctors interviewed by Aittola stressed that the natural sciences and especially information technology have priority in Finnish science policy. In Finland the field of information technology has just now an urgent need for experts with doctoral training. Accordingly, both science policy and higher education policy are favouring research and education that will contribute to the specialised use of new information technology.

In sum, there is at present a widespread discussion about the ways in which doctors benefit society, and the number of completed doctoral degrees is still a core element of national higher education policy. It has been argued that only doctoral education of a high standard can be assumed to ensure Finland a good competitive position in international science and scholarship and in the global economy. The graduate school institution has therefore been allocated considerable resources. It is, however, too early to evaluate all the effects which the new system has on doctoral training. The graduate school reform has surely achieved the aim of making doctoral education more effective and comprehensive in every discipline and field of study. But the tradi-

tional mode of doctoral education is still operating alongside the graduate school system. One consequence of this bifurcation may be the emergence of an elite sector in Finnish doctoral education although there is a great deal of overlap between the different parts of the system.

Open University and the Massification of Studying

An important aspect of massification in Finnish higher education is represented by the Finnish Open University. As has been noted above, Open University courses are offered practically in every second Finnish municipality. The Open University is within the reach of every citizen at a reasonable cost. As Ellen Piesanen shows in her study, the regular universities which deliver Open University education in Finland collaborate with a very broad range of educational institutions such as summer universities, adult education centres, folk high schools and vocational schools. This network makes it possible to offer Open University courses all over the country; it is also one of the reasons why the Open University in Finland contributes to social and educational equality by widening participation in higher education. The other central factors linked with the Open University that broaden participation include open access, opportunities for distance learning, and the existence of the Open University route to regular university studies. Furthermore, the Open University makes university-level instruction available to very different groups, including groups previously excluded from traditional student populations. In Finland this has meant especially participation by middle-aged working adults who may not have had a chance to enter university in their youth, but today the Open University caters also for young people who may similarly have failed to secure themselves a student place through normal student selection or who wish to see what studying at university is like before committing themselves to regular university studies.

In fact, we may speak about ways in which the Open University can serve lifelong learning on the level of higher education. As a term, lifelong learning covers a very broad field, but at its simplest it represents the aim of ensuring individuals educational opportunities throughout their life course. The potential of the Open University to promote lifelong learning is broad.

209

Piesanen found that as a rule, the under-25 Open University students admitted to a regular university during the follow-up gained their student place through normal student selection. That is, over 90 per cent of those given a regular student place had applied for and gained their entry through the normal application process. Ellen Piesanen points out in her article that Open University studies affect not only the students attending it but also higher education and social policy. The data described in the article reflects a view that emerged in the course of an examination of the life situations of young adults studying at the Open University. For them the Open University route is not a particularly relevant means of gaining access to a regular university, but it seems that Open University studies do offer them special indirect advantages as regards their subject, personal abilities, the nature of university studies, the formation of a career perspective, and career development. According to the findings, studies at the Open University benefit most those who hope to be eventually accepted as regular university students. From this perspective, the Open University is serving today's massifying university institution well.

Massification of Learning and Teaching

Eeva Kallio's article examines the concepts of massification and globalisation of higher education and contrasts them with a number of concepts from developmental psychology. The traditional task of universities is to train autonomous, self-directed and critical citizens who think scientifically. In her article Kallio asks whether these aims are feasible in massified, marketised and globalised universities.

The pressure to organise university teaching in ways requiring students to attend crowded lectures reduces the scope for individualised tutoring and counselling. There is a contradiction here: on the one hand, our psychological knowledge of adults tells us that they are autonomous, individualised subjects who are critically aware as they separate facts from non-facts. On the other hand, the teaching practices applied in massified universities may not accord with this developmental task faced by growing adults. If massification is identified with crowded lectures and surface learning practices, it can be questionable whether such developmental tasks are really being taken into consideration in modern universities.

210

In the scientific community, the autonomy of any information means that we are able to and must be constantly taught to evaluate scientific knowledge, to contrast scientific results, and, in an ideal situation, to draw from them our own, independent conclusions. This might be the ideal state of autonomous thinking. Such training means, at the same time, that extrinsically oriented students are taught to think intrinsically. Kallio argues that from the perspective of psychology, it may be assumed that autonomous, relativistic and dialectical cognitive development can be viewed as a mechanism for adapting to the 'megatrend' formed by the information society and globalisation. Some interesting questions should, however, be asked here. Does globalisation mean the survival of different thinking styles – national, local, cultural, and so on world views, values, scientific traditions – or does it mean economic pressure to limit oneself exclusively to Western culture as an absolutistic way of defining norms for thinking? Is globalisation a question of adopting some 'universal' mode of academic training and scientific thinking or does it imply locally modified, individually creative ways of enriching scholarly culture? But surely globalisation can also have side effects that are positive in terms of the development of postformal thinking.[3] Its best consequences may make for closer discussion between many different cultures, thus improving opportunities to create new scientific innovations because impulses from a diverse range of academic cultures are one precondition for an exchange of ideas. A consideration of globalisation from these two viewpoints reveals that it may be a double-edged question.

Finland has, unlike many other countries in the world, had a very homogeneous culture. This is in itself an interesting sociological factor, and psychologically considered, the sociopsychological climate of the Finnish higher education system may reflect the homogeneity of Finnish culture. As such, a homogeneous higher education culture where there is no definite multicultural climate can, in the field of science and scholarship, produce absolutistic world views and excessively rigid traditions and schools of thought. Considering the positive aspects, international student exchange may be a good example of globalisation as a factor that fosters postformal thought. This is a hypothesis capable of being empirically tested, but more speculatively, becoming

[3] Postformal thinking, characterised by autonomy, relativism and a dialectical approach to the contradictions of knowledge (see Kallio in this book).

211

familiar with different cultural backgrounds and value systems may have a triggering effect on student thinking, and surely it will instil relativism and tolerance.

Universities as Massified Schools?

Sanna Honkimäki observes that not only has the number of university students grown but the ratio between students and teachers has also deteriorated. In 2000 there was one member of the teaching staff between 20 students in Finnish universities, whereas in 1985 there had been 13 students per a member of the university teaching staff: professors, lecturers, assistants, and full-time teachers. This is another consequence of the massification of higher education. Moreover, students of the 21st century speak about university in a new way. Instead of 'university', 'fellow student', 'university studies', the students use such expressions as 'school', 'schoolmates', 'going to school'. The basic question addressed in Honkimäki's article is: can we assume that the way in which students talk about university and university studies is a symptom of some real change in these institutions and activities? Honkimäki argues that the talk about university being 'like school' is more than a turn of phrase; it is connected with an altered relationship between work and studying in university students' lives. In addition, it is probably also an indication of curricular and interactional problems, in the mass university, between students and university teaching staff. According to the study, the main problems involved in the massification of teaching as experienced by university teachers are deficiencies in resources, poorly developed evaluation practices, lack of proper educational technology, and a constant need to reform degree programmes.

In recent years, university studies have become an issue of debate. The fact that the debate is a public one is a new phenomenon in Finland. This is also one of the changes related to the massification of higher education. Public opinion has much more to say about the quality of teaching in universities because it is the public who, as taxpayers, picks up the bills. A related issue is the increasing demand for quality. This has also an institutional dimension. It seems that in order to survive and develop, university has been forced to take on a new task along with its traditional ones, research and teaching. This new task is enhancing the quality of teaching and learning.

Universities and Their Changing Operational Environments

Universities in Finland have been challenged by rapidly changing societal and economic environments. As a response to these often conflicting views and changes, Finnish universities are developing new managerial procedures that are meant to help them to adjust to the changes underway in their social environment. According to Välimaa and Jalkanen, this process of adaptation is based chiefly on strategic thinking. Finnish universities are learning to use strategic thinking as an instrument to maintain their operationality in a rapidly changing world. However, adopting new decision-making procedures alters also the institutional power relations. It seems that those involved in the process of preparing decisions will be the winners in the power struggles that may break out within higher education institutions. This means not only university officials but also those academics (often rectors and deans) who are active in the preparation of decisions.

New decision-making procedures combined with the use of national steering instruments have enhanced the influence of those funding higher education. Finnish universities are influenced by external funding coming both from public sources (the Academy of Finland being the most important one), from enterprises (global, national and local) and global actors (the most important being the EU). In short, the strategic flow in institutions of higher education has the potential to tie the production of knowledge more closely to local contexts, national demands and global expectations. This new situation is related to the globalisation of higher education.

Globalisation and National Higher Education Systems

Globalisation in Higher Education Policy

A public awareness of the increasing mutual interconnectedness of our world has made globalisation more popular as a concept not only in economics but also in the context of political and cultural issues. Accordingly, the last chapter of our book will take a look at this phenomenon as it affects Finnish national higher education system. There is a need to clarify what globalisation means when it is considered from the perspective of a strong national system

213

of tertiary education. Further, we must reflect on globalisation as a research topic although we are not yet able to provide answers to the questions that we pose.

Throughout the 1990s, globalisation has been a hidden theme in the papers outlining Finnish higher education policy even though as an explicit concept globalisation was introduced only lately. That is, Finnish national higher education policy has placed a strong emphasis on the value of higher education as a part of the national innovation strategy intended to increase Finland's and Finnish enterprises' international competitiveness. Figures from the Ministry of Education show that Finland has invested heavily in research and development (Higher Education Policy 1996, 1998, 2000). The universities' staff structure suggests the same trend because the number of other staff paid from external funding has almost doubled during the 1990s. Both public and private funding providers have strongly supported applied and technological research. In addition, the structure of funding is also changing because the proportion of funding from public sources has been falling steadily (in 1990 it accounted for 84% of total university funding whereas in 1999 the figure was 65%) (see chapter 2 in this book). All these changes are related to globalisation because developments in Finnish universities reflect the concerns of a competitive nation state. The national aim is to increase Finland's international competitiveness on the world market.

Globalisation and Neoliberalism

It is quite impossible to speak about globalisation without mentioning the other magic catchword, 'neoliberalism'. These two concepts are interconnected also in Finland, where it is evident that the national higher education system is being steered along lines suggested by neoliberal ideas of a good society. This is a society that is guided by the rational choices of the relevant actors (normally individuals) and where rational choices are normally made on the market. Therefore, it makes sense to assume that rational choices optimise the efficiency of society (of many kinds of social systems) (see Carrier 1997).

The problem with higher education in Finland is, however, that there have been no real markets for students (universities select their students rather than vice versa), university teachers (one can count oneself lucky if one secures a permanent position because only every third academic staff member is

employed on a permanent basis), or institutions (they do not compete with each other for students or teachers, and compete only occasionally for research funding because normally the competition takes place within academic fields, not between institutions). As a result, there is no distinct social system – or market – where to make rational choices between different options. However, following the cultural ideal of a market model the Ministry of Education has sought to create market forces. Officially this system is called steering through management by results. Accordingly, universities 'negotiate' with the Ministry of Education for their funding and the number of degrees (MAs and PhDs) that each university will produce. The essential point is, therefore, that the ministry employs competition as a steering instrument among educational institutions. The same ideal is repeated within the universities themselves, where rectors use negotiations conducted according to the principles of management by results as a steering instrument in their dealings with the faculties and the other independent units. Management by results has influenced also the functioning of the academic basic units and the professional activities of the individual academics because academic communities perceive productivity and efficiency as relevant and important goals.

Is this neoliberalism? One can say that of course it is not typical neoliberalism, but it should be borne in mind that neoliberalism is not an ideology but, rather, a starting point for criticism by different ideologies and political groups (from conservatives to liberals) against the traditional ideology of the welfare state, as has been pointed out by Mitchell Dean (1998). Therefore, management by results as practised in Finnish higher education is neoliberalism in the sense that the aim is to create market forces where there have been none before, and in the sense that the intention is to improve a previous system grounded on the welfare-state ideology. Bargh and others (1996) have termed this social phenomenon "marketization of higher education", thus focusing attention on attempts to generate competition between and within higher education institutions. The competitive environment of tertiary education is also related to globalisation processes because the aim of the national higher education system is to make higher education a part of a national innovation system intended to improve Finland's economic efficiency.

215

Globalisation and Localisation of Knowledge

In Finland, the expansion of higher education has led not only to the massification but also to the 'provincialisation' or rather, 'localisation' of higher education. The foundation of polytechnics has been an extension of this national policy. Thus, the localisation of higher education has not only reinforced the national importance of higher education institutions but also promoted regional development in the Finnish provinces (see chapter 2 in this book). Today, higher education institutions – no matter whether they are universities or polytechnics – are defined as "engines of development in their regions". This expression may be interpreted as indicating a new sense of loyalty directed towards regions with higher education institutions. In addition, the localisation of higher education also provides new perspectives on the globalisation of higher education. When nation states are challenged by global actors, new localised higher education institutions may find it easier to discover new funding sources and partners if they belong both to regional and to global networks. In this sense they may be examples of the new social forms discussed by Nowotny and others (2001) under the name of the *agora*. Thus, the definition of a higher education institution as a local institution may promote both its national character and its global and international nature because – and depending on whether – it has networks in its home region. A further ingredient is thrown into this new social soup by external funding agencies: universities are influenced by external funding coming both from public sources, from enterprises and global actors. In short, the 'strategic flow' in institutions of higher education has the potential to tie the production of knowledge more closely to local contexts, national demands and global expectations because it provides university management with instruments to translate external expectations rapidly into internal operations.

Globalisation of Educational Markets

Another aspect of globalisation is the new situation on educational markets. New forms of higher education institutions, especially for-profit universities, are creating new challenges to the traditional providers of higher education in Europe, and the market situation where higher education institutions operate and where students are looking for an education is potentially changing. We

216

may, however, ask why international for-profit universities have not been interested in Finnish students, or even more precisely: why have there been no real markets for private universities in Finland?

The answer is threefold. The most important reason is evidently a lack of student markets. It is obvious that there are not enough students in Finland who would be willing to pay for an education. At the moment, almost 70 per cent of the age cohort are offered a starting place in public higher education, either in universities or in higher vocational education institutions. Studying is free of charge. Secondly, permissions to grant degrees are given by the Ministry of Education, which also decides about the equivalence between foreign and Finnish degrees.[4] In other words, the Ministry of Education determines which institutions have the right to confer degrees accepted in Finland. It is clear that students are not very willing to take risks in this area, especially if they have to pay for their education themselves. Labour market needs have not (yet?) played a role in this situation. It is not impossible that employees' requirements will eventually weaken the social status of Finnish academic degrees if and when business enterprises begin to prize other degrees than those approved by the Finnish Ministry of Education. However, there are no signs of any such developments to been seen.

The third factor may be the Finnish language: foreign providers of higher education are wise to concentrate on fields which have both an international and a professional orientation. This criterion tends to exclude social workers, teachers, civil servants and 'national professionals', in other words experts who need Finnish in their daily communication and who therefore must be familiar with Finnish concepts and expressions. However, business studies offer an example of a field combining a professional and an international orientation. This is also one of the academic fields where international competition is at its fiercest, with many international and national providers of MBA degrees active in Finland. This has, among other consequences, persuaded Finnish schools of economics and business administration to demonstrate the quality of their own degree programmes in public. As a result, two of them have been

[4] Even though there is no system of accreditation in Finland, the Ministry of Education handles the matters that in other countries are the responsibility of accreditation agencies. It has been said that the ministry is "a kind of" accreditation agency.

217

evaluated by the European Foundation for Management Development and given an EQUIS (European Quality Improvement System) quality label.

A recent change is represented by an American university, Preston University, which has begun to offer BA and MBA and PhD programmes in business and computer sciences. The first two campuses were established in two rural municipalities (Kittilä and Ylivieska) at the end of the 1990s. They have not been a success story, however, because during the first years of activity the institution has had only a few dozens of students while the drop-out rate is practically 50 per cent (oral information). One of the reasons may be the establishment's failure to secure an accreditation from the Ministry of Education; its programmes are, moreover, rather expensive in the context of Finnish free higher education.

Another example that illustrates the Finnish situation is offered by attempts to establish, in the mid-1990s, a private university in Kuopio, a smallish Finnish town located in the eastern part of the country. A Russian private university wished to begin to teach Russian students there. The problem was, however, that the Russian university was not accredited in its home country. The project ran a ground soon because no students materialised. There are, however, no legal restrictions imposed by the Ministry of Education to prevent the founding of private universities.

Even as failures, the two attempts indicate that the educational marketplace is in transition in Finland. They also show that there is an openness to new structural solutions at the system and institutional levels.

Globalisation as an Emerging Research Topic

Globalisation in higher education is an emerging topic. The challenges created by social changes both in international relations and in the internal social dynamics of nation states, the "shake-out of societies" as it has been described (Giddens 1996), have affected also higher education. In higher education, however, the situation is more complicated than in other areas of national public sectors. What we mean is that from a somewhat sceptical starting point we could argue that some of the theoretical perspectives put forward by Castells (1996, 1997, 1998) are not very new in the field of higher education studies. One could ask: has not the academic world (or 'invisible colleges', or

'disciplinary traditions') always been based on networks, on personal contacts between individuals? So what is new about these new concepts?

A possible answer to these critical questions might start with a reference to the changing nature of information flows and the new possibilities created by new information technologies. Accordingly, what is new in the current situation is the context in which these change processes are taking place. It is not only the speed of these change processes but also the new challenges that global actors are posing for local ones that are important here. The dynamics of higher education may be altering because higher education institutions are not necessarily any longer mainly national institutions.

It is possible to define two interrelated research topics linked with globalisation in higher education as it has been discussed above. First, *globalisation of educational markets* challenges national higher education institutions to enter the field of global competition. Secondly, the global actors (business enterprises and regional authorities such as the EU) may exert *influence on knowledge production* within higher education institutions. Both of these processes have thepotential to test (and change) the power of the national central authorities regulating higher education.

The changes in the functioning of educational markets are an interesting and increasingly central topic not only in Finland but also elsewhere in Europe (Westerheijden, Sporn, Välimaa 2000). The question is essentially this: what will happen to national higher education institutions when educational markets are opened for international competition?

The challenges facing knowledge production may come from two different directions. First, as Ulrich Beck (1999) has noted, globalisation challenges those disciplines – especially the social sciences, education and certain fields of the humanities – which have been gathering information within the boundaries of the nation state, thus reinforcing and instituting it as a social actor and social entity. From this perspective, it can be maintained that most academic fields of knowledge production (such as Finnish history, anthropology, national economics, most fields of education, sociology, social policy etc) have established their scholarly legitimacy on the social basis created by the idea of the sovereign nation state. Will more globalised cognitive interests lead to reformulations of their social and academic tasks? Globalisation affects the production of knowledge also through another route. The fact that knowledge and information have become important production factors has

also made global business enterprises interested in partnerships with universities (and research institutions). The Finnish experience suggests (Välimaa 2000) that potentially this will enable global enterprises to influence the operations and activities of higher education institutions because they fund research projects. This also raises new research questions to be addressed in the coming years.

References

Ahola, S. 1995. Eliitin yliopistosta massojen korkeakoulutukseen (From elite to mass higher education). University of Turku. Research Unit for the Sociology of Education. Report 30.

Bargh, C., Scott, P. & Smith, D. 1996. Governing universities. Changing the culture? Bury St Edmunds: SRHE & Open University Press.

Beck, U. 1999. Mitä globalisaatio on? (Was ist globalisierung? Irrtümer des Globalismus – Antworten auf Globalisierung). Tampere: Vastapaino.

Carrier, J.G. 1997. Meanings of the market. The free market in western culture. Oxford & New York: Berg.

Castells, M. 1996. The information age: Economy, society and culture. Volume I: The rise of the network society. Oxford: Blackwell.

Castells, M. 1997. The information age: Economy, society and culture. Volume II: The power of identity. Oxford: Blackwell.

Castells, M. 1998. The information age: Economy, society and culture. Volume III: End of millennium. Oxford: Blackwell.

Clark, B.R. 1983. The higher education system. Berkeley: University of California Press.

Dean, M. 1998. Neo-Liberalism as counter-enlightenment cultural critique. In S. Hänninen (ed.) Displacement of social policies. Jyväskylä: SoPhi, 198–226.

Giddens, A. 1996. Sociology. Cambridge: Polity Press.

Higher Education Policy 1996, 1998, 2000. Higher Education Policy in Finland. Helsinki: Ministry of Education.

Nowotny, H., Scott, P. & Gibbons, M. 2001. Re-Thinking science. Knowledge and the public in an age of uncertainty. Cambridge: Polity Press.

Scott, P. 1995. The meanings of mass higher education. Bury St Edmunds: SRHE & Open University Press.

Trow, M. 1974. Problems in the transition from elite to mass higher education. Policies for higher education. Conference on Future Structures of Post-Secondary Education. Paris.

Universities Act 1997. (Yliopistolaki. L 645/1997).

Välimaa, J. 1998. Tohtori tuli taloon? Tutkimus tohtoreista ja pk-yrityksistä (Is there a doctor in the house? A study of doctors and SMEs). Jyväskylän yliopisto: Koulutuksen tutkimuslaitos.

Välimaa, J. 2000. Globalization in higher education: actions and reactions – the case of Finland. CHER Annual Conference, 14–16 September 2000, Windermere.

Välimaa, J. 2001. The changing nature of academic employment in Finnish higher education. In J. Enders (ed.) Academic staff in Europe: Changing contexts and conditions. Westport (Conn.): Greenwood Publishing Group, 67–90.

Westerheijden, D., Sporn, B. & Välimaa, J. 2000. Think global, resist local? Three cases of reactions to globalisation in higher education. 22nd Annual EAIR Forum, 6–9 September 2000, Berlin.

221

Finnish Summary
Suomenkielinen yhteenveto

Välimaa, Jussi (toim.) 2001. Suomalainen korkeakoulutus muutoksessa – näkökulmia massoittumiseen ja globalisaatioon. Jyväskylän yliopisto. Koulutuksen tutkimuslaitos.
ISBN 951-39-1133-0

Koulutuksen tutkimuslaitoksessa työskentelevät korkeakoulutuksen tutkijat ovat kirjoittaneet kirjan, jossa pohditaan suomalaisen korkeakoulutuksen muutoksia. Kirjassa huomion kohteena ovat pääasiassa yliopistot. Artikkelit perustuvat pääosin empiirisiin tutkimuksiin, joita tutkijat ovat tehneet muutaman viime vuoden aikana. Tutkijoiden keskeinen yhteinen ajatteluväline on korkeakoulutuksen massoittuminen. Tämä käsite tuotiin korkeakoulututkimukseen 1970-luvulla. Massoittumista on käytetty sosiologisena käsitteenä kuvaamaan tilannetta, jossa korkeakoulutuksen opiskelijamäärät kasvavat huomattavasti (tavallisesti rajana on pidetty 15% ikäluokasta). Tämän kasvun seurauksena korkeakoulutuksen funktio kouluttajana muuttuu. Se ei enää kouluta eliittiä varmoille – ja etuoikeutetuille – työmarkkinoille, vaan asiantuntijoita työelämän palvelukseen. Teoksessa otetaan myös kantaa siihen, mitä globalisaatio tarkoittaa korkeakoulutuksen kannalta ja millaisia tutkimushaasteita se nostaa esiin.

Teoksessa tarkastellaan sitä, mitä seurauksia korkeakoulutuksen massoittumisesta on ollut korkeakouluille. Kirjan avaa Jussi Välimaan artikkeli, jossa annetaan ulkomaisille lukijoille keskeisiä kulttuurisia koordinaatteja suomalaiseen yhteiskuntaan. Kirjan muille artikkeleille taustoittavana lukuna on myös toinen luku, jossa Välimaa luo katsauksen Suomen korkeakoululaitok-

sen historiaan. Tavoitteena on analysoida, millä tavalla yliopistot ja korkeakoulut on Suomessa ymmärretty kansallisina instituutioina. Välimaan mukaan käsitys yliopistosta kansallisena instituutiona vahvistui varsinkin 1800-luvulla, kun silloisen Helsingin yliopiston piirissä toimivat henkilöt loivat fennomaanien vision kansakunnasta. Korkeakoulujen kansallinen merkitys on koettu tärkeäksi koko Suomen itsenäisyyden ajan. Uusinta tulkintaa siitä edustaa käsitys korkeakouluista kansallisen innovaatiojärjestelmän osana.

Kirjan kolmannessa luvussa tarkastellaan massoittumista ja globalisaatiota sekä ajattelun välineinä (sanoina ja käsitteinä) että yhteiskunnallisina ilmiöinä. Ideana on koota teoksen keskeisten käsitteiden analyysin yhteen lukuun, jotta niitä ei tarvitse laajasti määritellä jokaisessa luvussa erikseen. Välimaan mukaan molemmat sanat saavat useita merkityksiä samalla kun niiden käyttö tutkimuksen välineenä sisältää eri tulkintoja yhteiskunnallisten muutosten luonteesta. Massoittuminen akateemisessa arkikielessä viittaa usein ongelmiin opetuksen organisoinnissa ja oman työajan hallinnassa. Samalla massoittuminen yhteiskunnallisena ilmiönä tarkoittaa opiskelijamäärän laajentumisen ohella korkeakoulujen yhteiskuntasuhteiden muutosta, rahoituslähteiden monipuolistumista, korkeakoulujen erilaistumista ja opiskelija-aineksen erilaisuuden lisääntymistä. Se asettaa myös uusia vaatimuksia korkeakoulujen toiminnan kehittämiselle. Globalisaatio kansalaiskeskustelun käsitteenä on tavattoman monimerkityksinen sana. Tämän ohella globalisaatiosta yhteiskunnallisena ilmiönä on erotettavissa ainakin kolme erilaista koulukuntaa. Kansainvälisessä keskustelussa on ensinnäkin esitetty, että globalisaatio tekee kansallisvaltiot lähes tarpeettomiksi, sillä globaalit toimijat (sekä yritykset että poliittis-taloudelliset liittoutumat kuten EU) syrjäyttävät voimallaan suvereenit kansallisvaltiot. Tämä hyperglobalisaation kannattajien joukko pitää kuitenkin globalisaatiota etupäässä talouden ilmiönä. Heidän vastapainonaan ovat skeptikot, joiden mukaan ei voi puhua mistään globalisaatiosta, vaan lähinnä pitäisi puhua kansainvälistymisestä, jossa kansallisvaltiot ovat edelleenkin merkittäviä toimijoita. Kolmantena ryhmänä ovat muutoksen tunnustajat, jotka myöntävät, että nyt on tapahtumassa jotain historiallisesti uutta ja ennenkokematonta, vaikka ei voidakaan vielä tarkasti sanoa, mitä tämä yhteiskuntien ravistelu tarkoittaa ja mihin se johtaa.

Näiden johdannonomaisten lukujen jälkeen teoksessa ryhdytään tarkastelemaan suomalaisen korkeakoululaitoksen muutoksia empiiristen aineistojen tuella. Helena Aittola tarkastelee neljännessä luvussa eri sukupolviin kuulu-

vien tohtoreiden käsityksiä yliopistosta ja väitöskirjan tekemisestä. Artikkeli perustuu 12 eri ikäisen tohtorin haastatteluihin. Keskeistä näyttää olevan se, että suomalainen massoittunut yliopistolaitos on asettanut tehokkuuden ja tuottavuuden keskeiseen asemaan yliopistojen toiminnan arvioinnissa. Etenkin kokeneemmista tohtoreista tämä kehityskulku näyttää vaarantavan yliopistojen perustehtävän, eli korkeatasoisen tutkimuksen ja opetuksen. Pentti Määttä lähestyy tohtoritematiikka tutkijakoulutuksen näkökulmasta verraten sitä myös kansainväliseen tilanteeseen. 1990-luvulla toteutettu tohtorikoulutuksen uudistus – tutkijakoulujen perustaminen – on laajentanut ja tehostanut suomalaista tohtorikoulutusta merkittävästi. Laajentuminen on kasvattanut erityisesti luonnontieteiden ja teknisten tieteiden jatkokoulutusta. Toisaalta, tieteellisen jatko-opiskelun yleistyminen on kasvattanut naisten osuutta tohtoriopiskelijoista. Kansainvälinen vertailu näyttää osoittavan, että suomalainen tohtorikoulutus on saavuttanut ainakin määrällisesti hyvän keskitason.

Kuudennessa ja seitsemännessä luvussa tarkastelleen opetusta ja oppimista massoittuneessa yliopistolaitoksessa. Näkökulma on yliopistojen sisällä opettamisen ja oppimisen prosesseissa. Eeva Kallio tarkastelee psykologiassa käytetyn autonomisen ajattelun käsitteen avulla sitä, mitä massoittuminen ja globalisaatio tarkoittaa oppimisen kannalta, ja millaisia haasteita se asettaa opetuksen kehittämiselle. Lisäksi Kallion havaintojen mukaan massoittuminen opetuksessa tarkoittaa useinkin kokemusta siitä, että opiskelijoita ja työtä on liikaa. Sanna Honkimäki puolestaan kysyy, mitä tarkoittaa se, että opiskelijat puhuvat koulunkäynnistä ja koulusta opiskellessaan yliopistossa. Tämä kysymys avaa opiskelijanäkökulman massoittuneeseen yliopistoon. Artikkelissa tarkastellaan myös sitä, millaisia ovat opetuksen kehittämisen haasteet massoittuneessa yliopistossa.

Ellen Piesanen luo tutkimuksessaan ensin yleiskatsauksen suomalaiseen avoimeen yliopistoon. Hän tarkastelee lisäksi laajan empiirisen aineiston avulla sitä, miten avoimen yliopiston opiskelijat ovat käyttäneet avointa yliopistoa opinnoissaan. Jussi Välimaan ja Hannu Jalkasen tarkastelun kohteena ovat puolestaan yliopistojen hallinnossa tapahtuneet muutokset uuden yliopistolain säätämisen jälkeen. Heitä kiinnostaa se, miksi suomalaisissa yliopistoissa on menossa vahva strategisen suunnittelun ja ajattelun murros. Miksi yliopistot ovat joutuneet strategisen muutoksen virtaan?

Teoksen loppupäätelmissä vedetään yhteen keskeiset tulokset sekä katsotaan tulevaisuuteen. Näyttää siltä, että globalisaatio tuottaa uutta dynamiikkaa myös koulutuspolitiikkaan ja samalla haastaa tulevaa tutkimusta uusien kysymysten asettamiseen. Tekijät ehdottavat, että globalisaatiota olisi hyödyllistä katsoa kahdesta näkökulmasta. Ensinnäkin kiinnostavaa on kysyä, millä tavalla globaalit toimijat vaikuttavat uuden tiedon tuottamiseen yliopistoissa. Tämä kysymys on ajankohtainen siksikin, että yliopistojen autonomian lisääminen ja strategisen ajattelun virta on lisännyt yliopistojen mahdollisuuksia muuntaa ympäristön vaatimuksia sisäisiksi toimenpiteiksi entistä nopeammin. Toisaalta korkeakoululaitoksen massoittuminen on luonut Suomeen lokalisoituneen korkeakoululaitoksen, jossa korkeakouluja pidetään alueensa kehittäjinä. Tiedon tuotannon lokalisaatio yhdistyneenä tieteen globaaliin ulottuvuuteen voi luoda uutta dynamiikkaan niille korkeakouluille, jotka ovat kiinnittyneet alueidensa kehitykseen ja kehittämiseen. Miten tämä muuttaa ymmärrystä kansallisesta korkeakoululaitoksesta? Toinen globalisaation ulottuvuus on koulutusmarkkinoiden laajentuminen. Jopa Suomessa on aloittanut toimintansa ensimmäinen amerikkalainen yksityinen yliopisto. Laajemmasta näkökulmasta on ilmeistä, että kilpailu koulutusmarkkinoilla on koventumassa Euroopassa samalla kun uudet kansainväliset sopimukset vaikuttavat tutkintojen rakenteeseen. Miten käy silloin kansallisvaltioiden takaaman koulutuksen ja tutkintojen?

Descriptors: higher education, Finnish higher education, massification, globalisation, doctoral training, teaching, learning, open university, strategic thinking

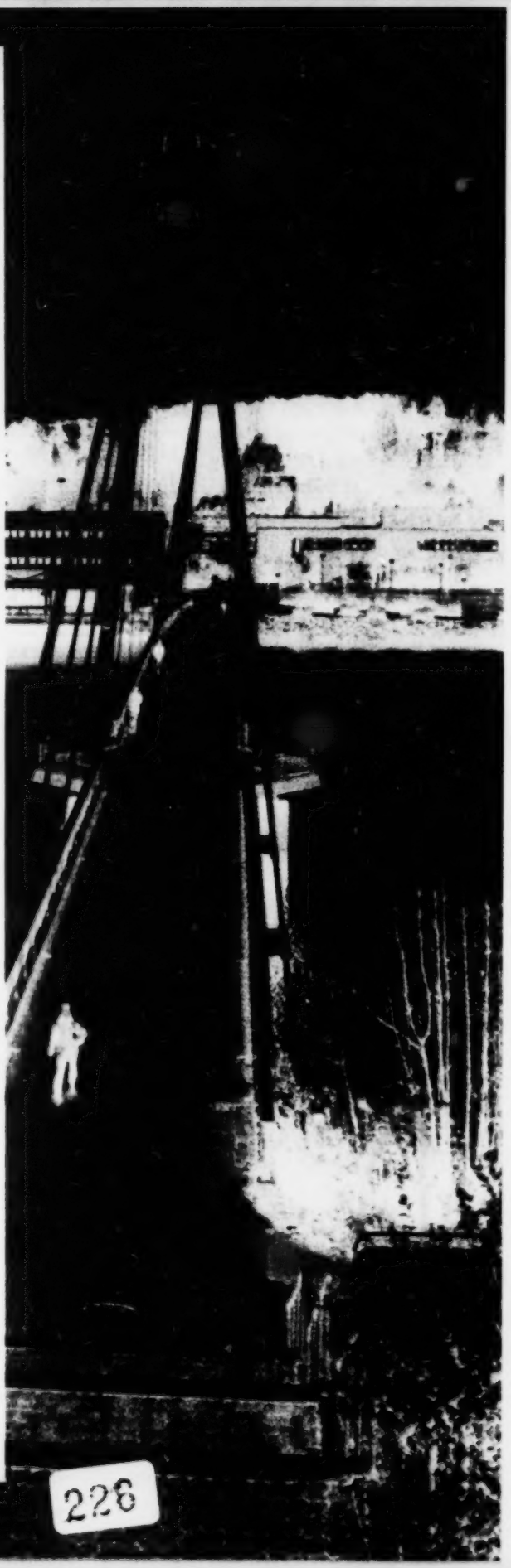
Finnish higher education is in transition. The processes involved in the expansion of higher education in Finland have created a national higher education system which has spread its influence throughout the country (see the cover picture and page 30). In addition, globalisation of higher education has begun to affect the dynamics of national systems of higher education. The book is intended to describe not only what has happened in Finnish higher education or to pinpoint the recent changes but also to analyse and explain what these changes mean: what are the directions in which Finnish higher education is moving in its transition?

The authors work as researchers and senior researchers in the Higher Education Studies Research team based at the Institute for Educational Research, University of Jyväskylä.

Front cover:

Finnish universities' main and branch campuses are shown with large orange circles and capital letters. Small circles indicate a municipality with no teaching facilities but a university research unit. The main campuses and branches of polytechnics offering teaching are indicated with blue circles.

ISBN 951-39-1133-0



226